STUDEBAKER LARK • STUDEBAKER HAWK

49th ANNUAL AUTOMOTIVE EDITION 1960 MODELS

RAMBLER • RAMBLER AMERICAN • AMBASSADOR

MICHIGAN'S ONLY INDUSTRIAL AND FINANCIAL RE
ESTABLISHED 1
MICHIGAN MANUFACTURER and FINANCIAL RECORD
DETROIT, NOVEMBER, 1959
Volume 104 Number 5

#2

AUTOMOBILE MFGRS. ASSOC.
B. HANKLA
WM.
ATT.
PUBLIC RELATIONS DIR.
320 NEW CENTRE BLDG.
DETROIT 2, MICH.

CADILLAC • BUICK • OLDSMOBILE • PONTIAC • CHEVROLET • CORVETTE • CORVAIR

IMPERIAL • CHRYSLER • DE SOTO • DODGE • PLYMOUTH • DART • VALIANT

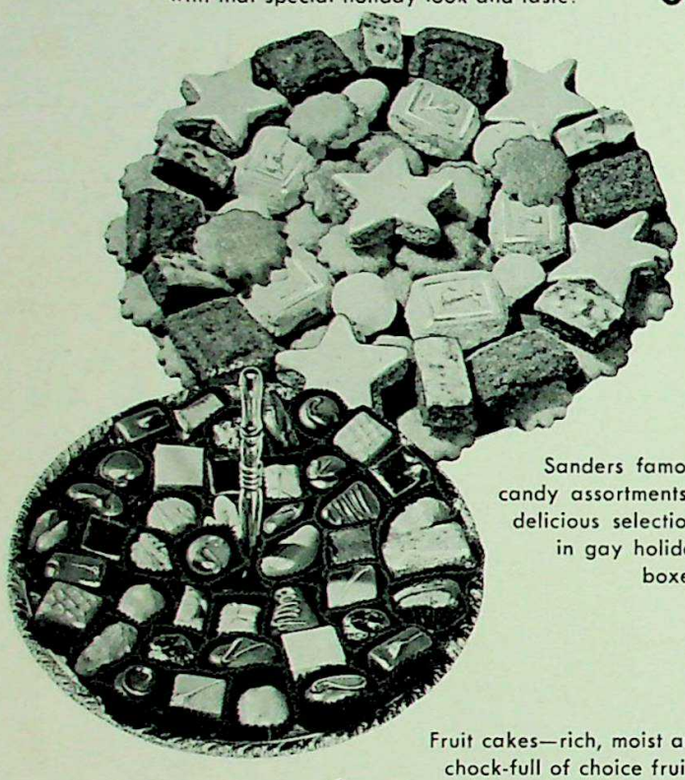
CONTINENTAL • LINCOLN • THUNDERBIRD • MERCURY • EDSEL • FORD • FALCON

TRUCKS — CHEVROLET • DODGE • FORD • GMC • REO • STUDEBAKER • WILLYS

Sanders
DETROIT

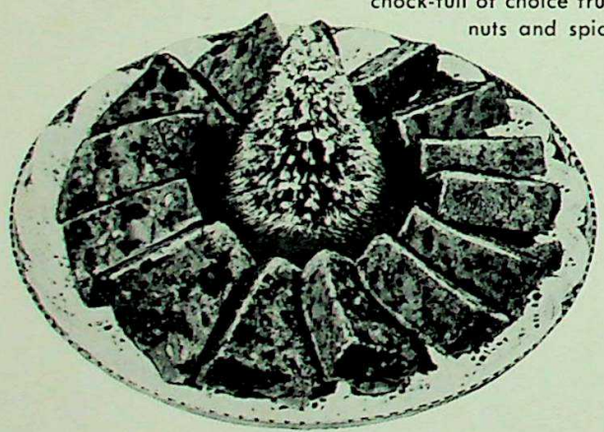
Good-Things-to-Eat
FUND-RAISING... OR COMPANY GIFTS

Christmas cookies, old-fashioned *Weinachtskuchen* with that special holiday look and taste!



Sanders famous candy assortments—delicious selections in gay holiday boxes!

Fruit cakes—rich, moist and chock-full of choice fruits, nuts and spices!



NEW DISCOUNTS save you up to 25%

Sanders good-things-to-eat, famous since 1875, make the perfect Christmas gift for customers, employees—and all your other friends. And our NEW DISCOUNTS, listed below, help you buy the very finest at substantial savings ($500 on a $2000 order).

If your club or group is thinking of fund-raising, let us help you plan a successful campaign through the sale of Sanders candy, cookies and fruit cakes. You'll find it especially easy to sell popular Sanders products, and the NEW HIGHER DISCOUNTS on our various fund-raising plans enable you to earn greater-than-ever profits.

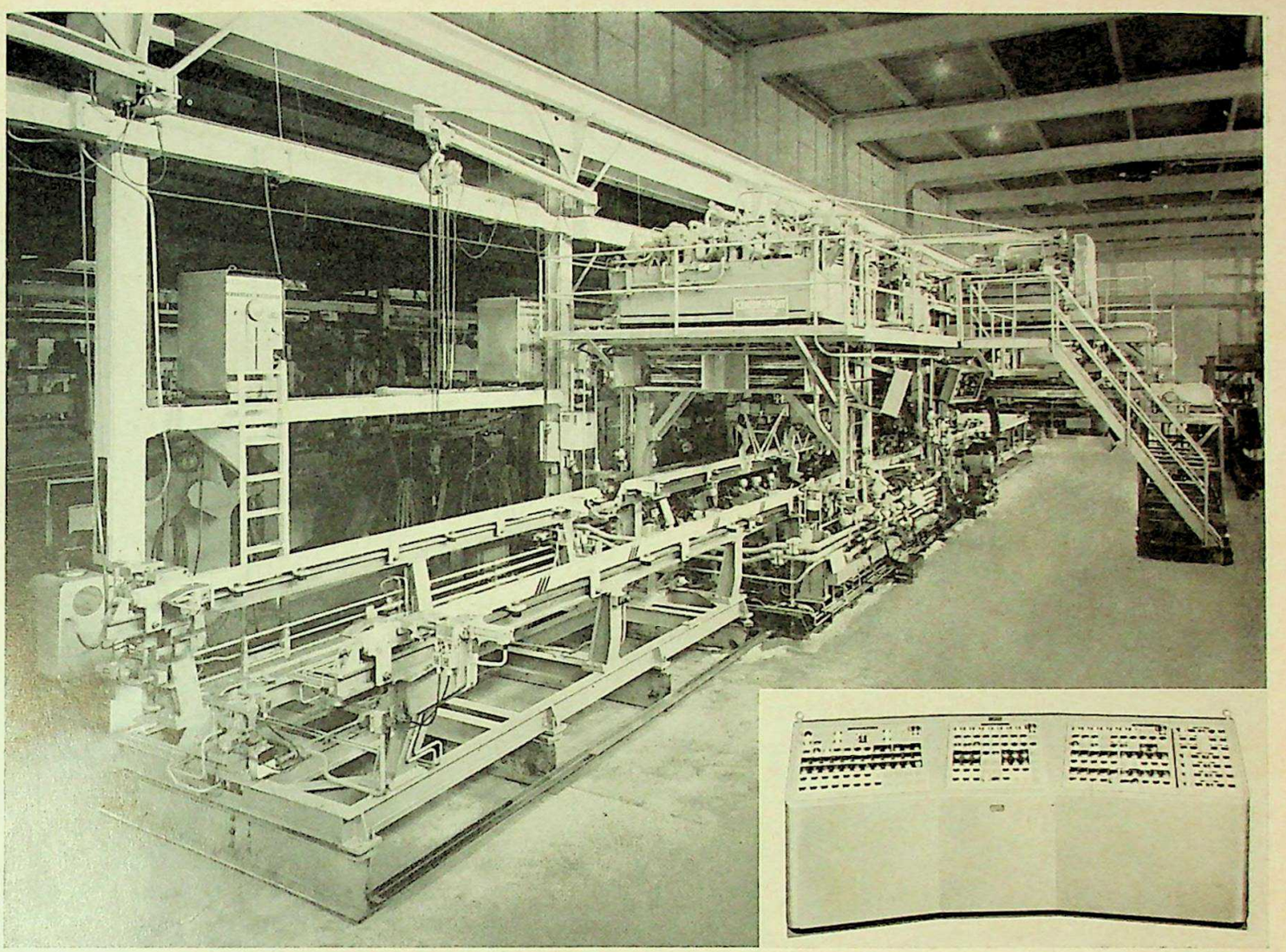
For our colorful Christmas candy booklet or for full details on fund-raising with Sanders, simply write to Mr. Fred Pantillon (address below) of our Special Order Department.

DISCOUNT SCHEDULE

AMOUNT OF ORDER	YOUR DISCOUNT
$ 50 to $ 299	10%
$ 300 to $ 999	15%
$1000 to $1999	20%
$2000 and over	25%

Sanders
SINCE 1875

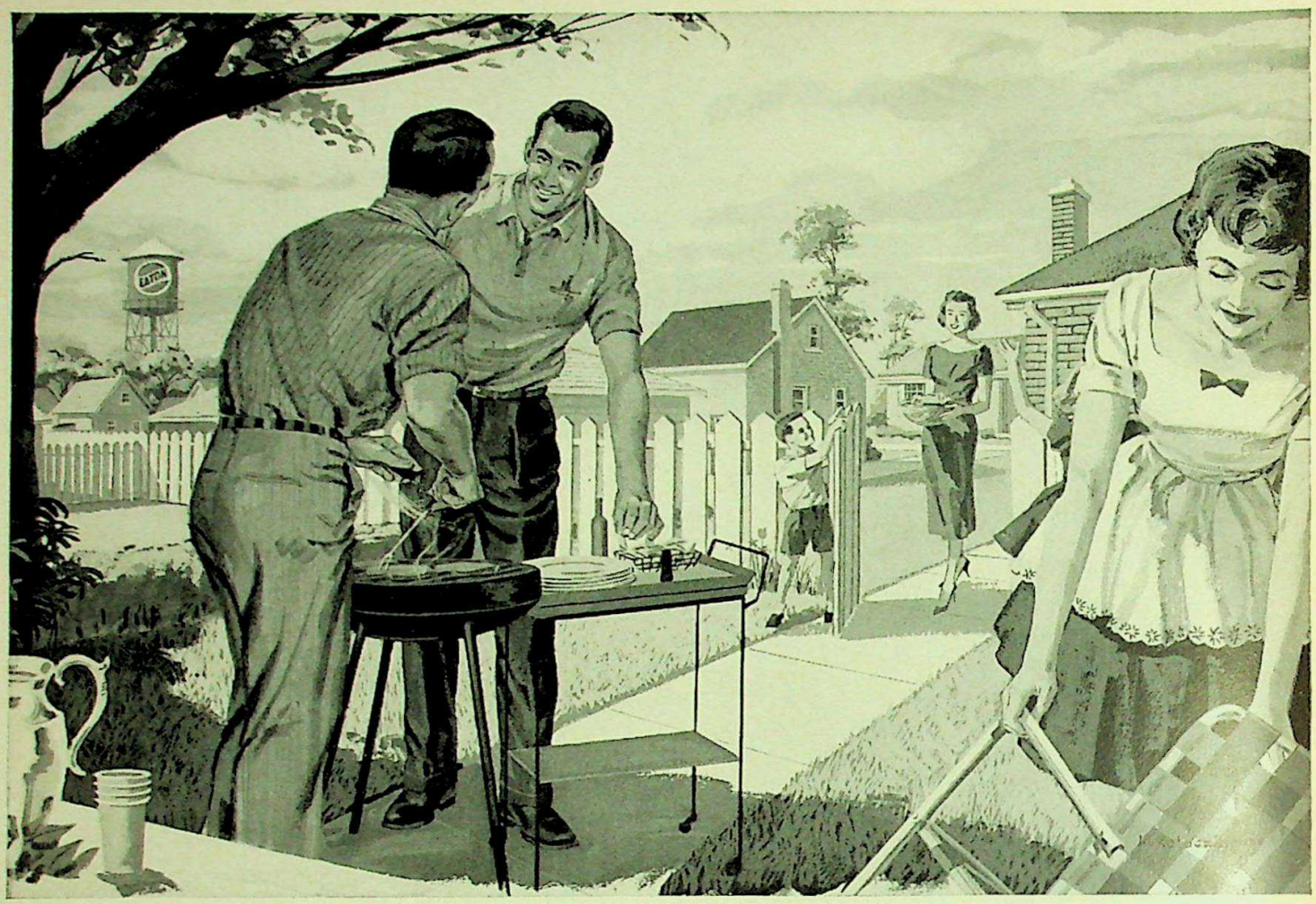
FRED SANDERS
106 Oakman Boulevard, Detroit 3, Michigan



AUTOMATIC (4) STATION, HYDRAULIC MULTIPLE PIERCE AND BORING MACHINES PROCESS 560 AUTO FRAMES PER HOUR

This is one of four machines, now operating in our customer's plant. These machines pierce (18) body and front suspension mounting holes while simultaneously boring (10) rear suspension mounting holes. The machines are fully automatic and hydraulically operated from load to unload station. Provision is incorporated for selective rejection of parts in process. All tooling is quickly interchangeable. 100% full hydraulic power standby at reduced capacity for multipierce station. All piercing heads built in unit type design for minimum yearly model "change over" time and cost. All electrical switch and solenoid components use quick disconnect fittings for ease and speed of maintenance. All machine functions are controlled from one centrally located console (inset). The machines were completely set-up for full simulated production tryout in our plant manufacturing area, thereby re-erection at the customer's plant was accomplished in record time.

Centri-Spray CORPORATION
39001 Schoolcraft Road, Livonia, Mich.
WO 3-1372 GA 2-9000 GL 3-3535



"How are things at Eaton?"

To families in the eighteen cities where Eaton plants are located, "how are things at Eaton" is of genuine interest. In these localities Eaton is an important part of the community's industrial and commercial life, accounting for a sizeable share of wages, taxes, bank clearings, carloadings, motor transport tonnage—and, indirectly, adding to the town's over all business volume.

Eaton's broad range of products and diversified markets (we serve every major industry, and are continually working to develop new and different products) provide a real element of security for our employees. They can look to the future with confidence that Eaton is keeping a step ahead in creating better products, and in developing advanced manufacturing methods which will keep its quality above average, its prices competitive, and its markets assured.

Foremost of our objectives is to keep Eaton a good company to work for, to do business with, to invest in—*a good company to have as a "neighbor" in any town.* Let us tell you more about our company, its plants, and its products; write for our new booklet.

EATON PRODUCTS

Engine Valves • Hydraulic Valve Lifters
Tappets • Valve Seat Inserts
Hydraulic Pumps • Viscous Drives
Motor Truck Axles • Axle Shafts
Truck Transmissions • Trailer Axles
Decorative Stampings
Permanent Mold Gray Iron Castings
Powdered Metal Parts
Heater-Defroster Units
Automotive Air Conditioning Systems
Fastening Devices • Cold Drawn Steel
Spring Lock Washers • Gears
Differentials • Speed Reducers
Centralized Lubrication Systems
Variable Speed Drives
Leaf and Coil Springs • Forgings
Dynamatic Drives and Brakes
Eddy-Current Dynamometers
Control Wire Assemblies
Magnetic Clutches • Plastic Parts
Hydraulic Control Valves
Pressure Radiator Caps

EATON®

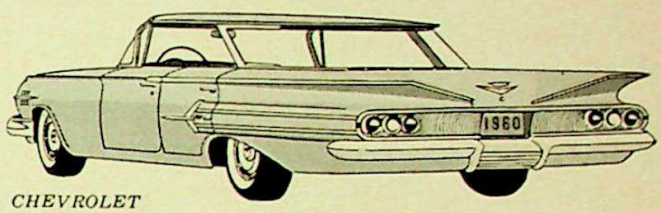
EATON MANUFACTURING COMPANY • *General Offices: Cleveland 10, Ohio*

EATON PLANTS: CLEVELAND • MASSILLON • MARION • DETROIT • SAGINAW • VASSAR • BATTLE CREEK • MARSHALL • LAWTON • COLDWATER
KALAMAZOO • LACKAWANNA • KENOSHA • MILWAUKEE • LOUISVILLE • RICHMOND, INDIANA • LONDON, ONTARIO • SAO PAULO, BRAZIL

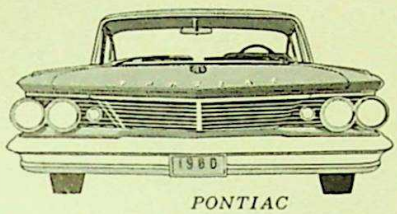
Entered as Second Class Mail Matter at the Post Office at Detroit, Michigan

These smartly styled '60's from General Motors demonstrate

THERE'S

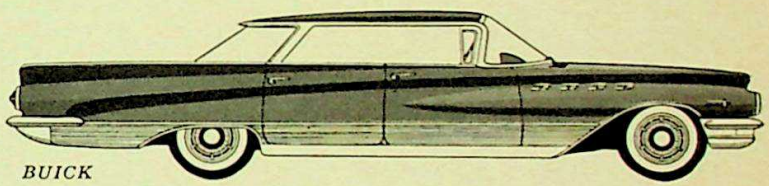


CHEVROLET

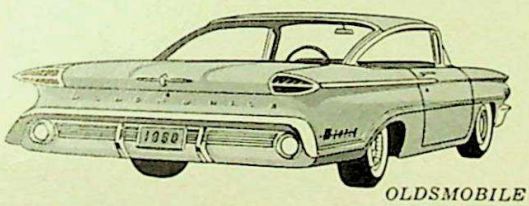


PONTIAC

NOTHING LIKE A



BUICK



OLDSMOBILE

NEW CAR

CADILLAC

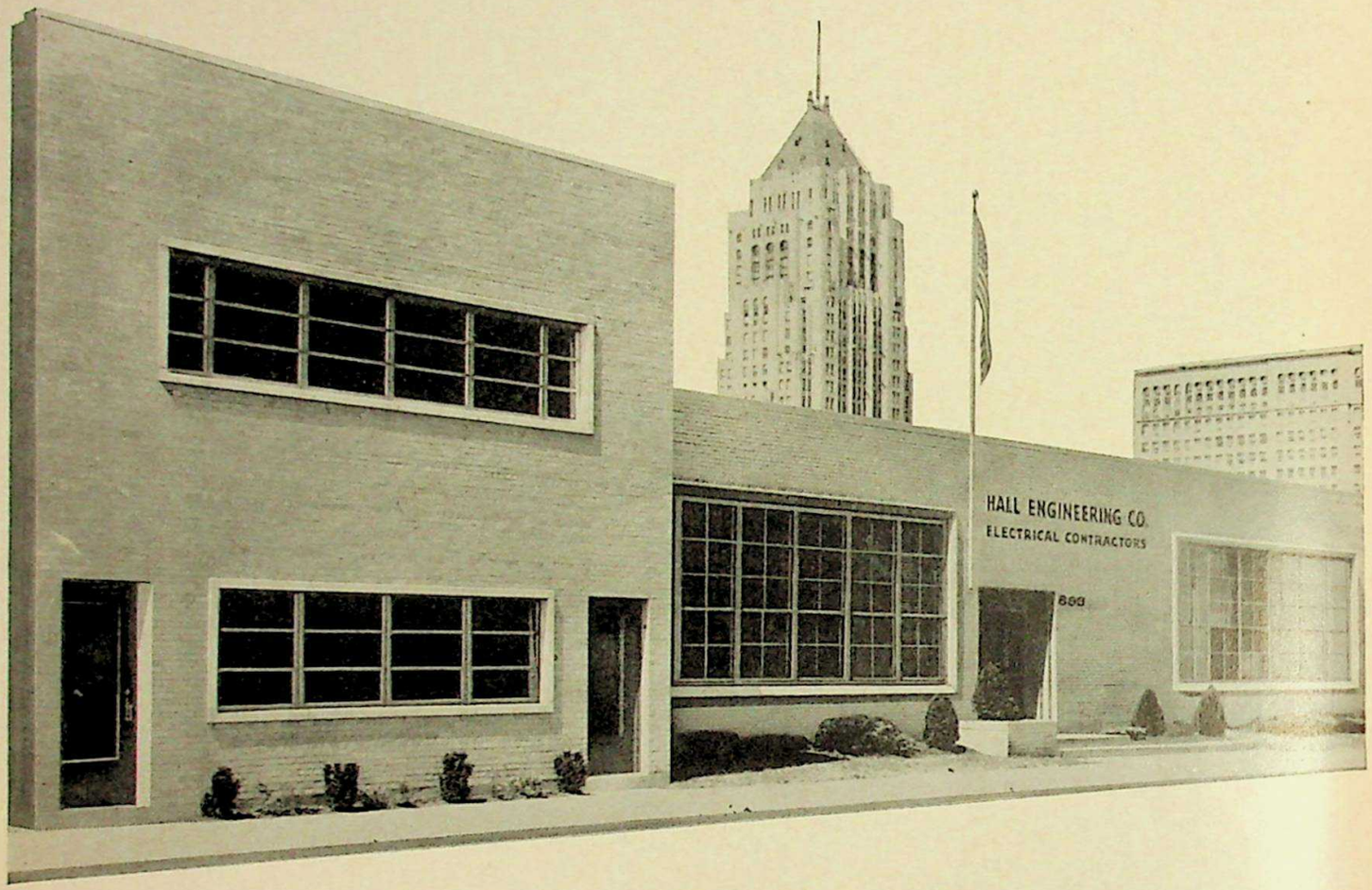
Whatever the yardstick . . . beauty, comfort, performance . . . the all-new General Motors line of great cars sets the pace for 1960! Each offers distinctive styling and the roomy safety of a Body by Fisher . . . along with all-round picture window visibility through Safety *Plate* Glass. Superior riding comfort, elegant interior appointments and advanced engineering refinements make ownership of these new cars truly exciting. Experience a new thrill . . . get behind the wheel of any one of these pacesetters soon . . . at any General Motors dealer.

GO GM FOR '60

GENERAL MOTORS

HALL ENGINEERING COMPANY

ELECTRICAL CONTRACTORS



Experience ✚ Modern Equipment ✚ Service

are

The Fundamental Parts

of

HALL ENGINEERING CO.

888 WEST BALTIMORE DETROIT 2, MICHIGAN TRINITY 1-8200

Auto Parts Maker Reports

High Molding Efficiency with RCI POLYLITE

POLYESTER RESIN

Cure Time Reduced to 42 Seconds

"With Reichhold POLYLITE Polyester resin we have achieved the most efficient, least costly method of production for our compression molded automotive fresh air ducts." This report comes from Lester F. Barnum, Vice President and Treasurer of Barnum Brothers Fibre Company, East Detroit, Mich.

"POLYLITE gives us about four times the curing speed obtained with other types of molding material. Press time with POLYLITE is only 38 to 42 seconds as compared to three minutes with other materials," continues Mr. Barnum.

As to final product, he says, "the resin exhibits exceptional impact and flexural strength as well as resistance to crazing and warping. It enables us to turn out a product that exceeds our customers' rigid specifications."

Perhaps there is a Reichhold POLYLITE Polyester resin that can help increase the efficiency of your production. Why not contact RCI and check the complete line of POLYLITE resins — not only for compression molding, but also for laminating, casting, structural layup, impregnating, encapsulating, rigid polyurethane foam production, surface coating, corrugated and flat sheet production and matched die molding.

Creative Chemistry ...Your Partner in Progress

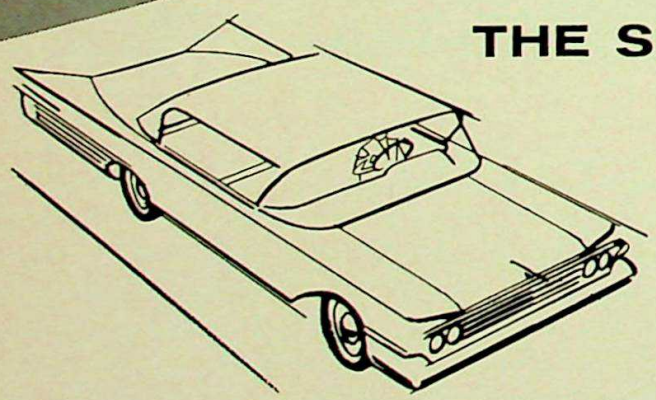
RCI

REICHHOLD

REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N. Y.

Synthetic Resins • Chemical Colors • Industrial Adhesives • Phenol • Hydrochloric Acid • Formaldehyde • Glycerine
Phthalic Anhydride • Maleic Anhydride • Sebacic Acid • Ortho-Phenylphenol • Sodium Sulfite • Pentaerythritol
Pentachlorophenol • Sodium Pentachlorophenate • Sulfuric Acid • Methanol

HELPING TO PUT THE SHOW ON THE ROAD



Automotive manufacturers look to many fine companies to help them turn out the gleaming, husky marvels of engineering and design that roll off automobile, farm equipment and road machinery production lines. And one of the oldest members of the cast in this giant production is Rockwell-Standard Corporation.

Today, Rockwell-Standard helps to put "the show on the road" by producing these quality products for the greatest names in the vast automotive industry.

Front and rear driving axles, planetary axles, steering and trailer axles • Torque converters, transmissions, transfer cases • Bumpers and brackets • Seat and back cushion springs and frames • Leaf and coil springs and spring steel products • Brakes • Universal joints and propeller shafts • Forgings and stampings

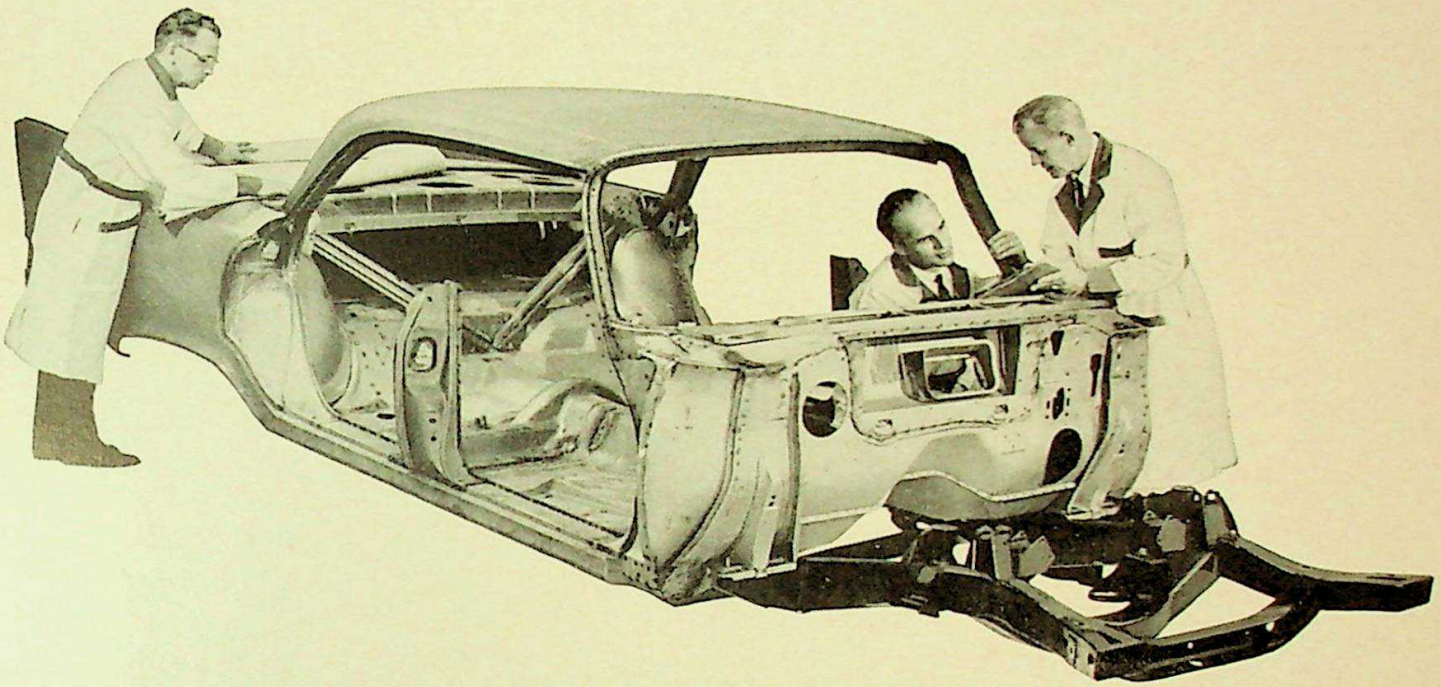
ROCKWELL-STANDARD
CORPORATION

ROCKWELL R STANDARD ®

GENERAL OFFICES: CORAOPOLIS, PENNSYLVANIA

Pure Automobile

the all-new ones from Chrysler Corporation for 1960



Surrounds you with silent strength

Unibody construction gives twice the torsional strength and 40% more beam strength

Here is a family of cars built a whole new way—the 1960 cars from Chrysler Corporation. We call this new construction Unibody because body and frame have been designed into a single, solid unit.

Gone is the old concept of a body and a frame held together with nuts and bolts. In the 1960 cars from Chrysler Corporation the new, all-welded body gives you a car with twice the torsional strength and 40% more beam strength than cars made the old way.

And also gone, with the nuts and bolts, are a surprising number of squeaks and rattles. These cars ride so quietly they sound and feel like they're going 10 miles per hour slower than they are.

Pure automobile—built stronger to last longer. And styled in quiet good taste to look good longer, too. Simple facts that mean these cars will bring many dollars more whenever they're sold or traded.

Stop in soon at your neighborhood dealer's and get acquainted with the all-new ones for 1960. Let a drive bring out the difference great engineering makes.

The Quick, the Strong, and the Quiet

VALIANT • PLYMOUTH • DODGE DART • DODGE • DE SOTO

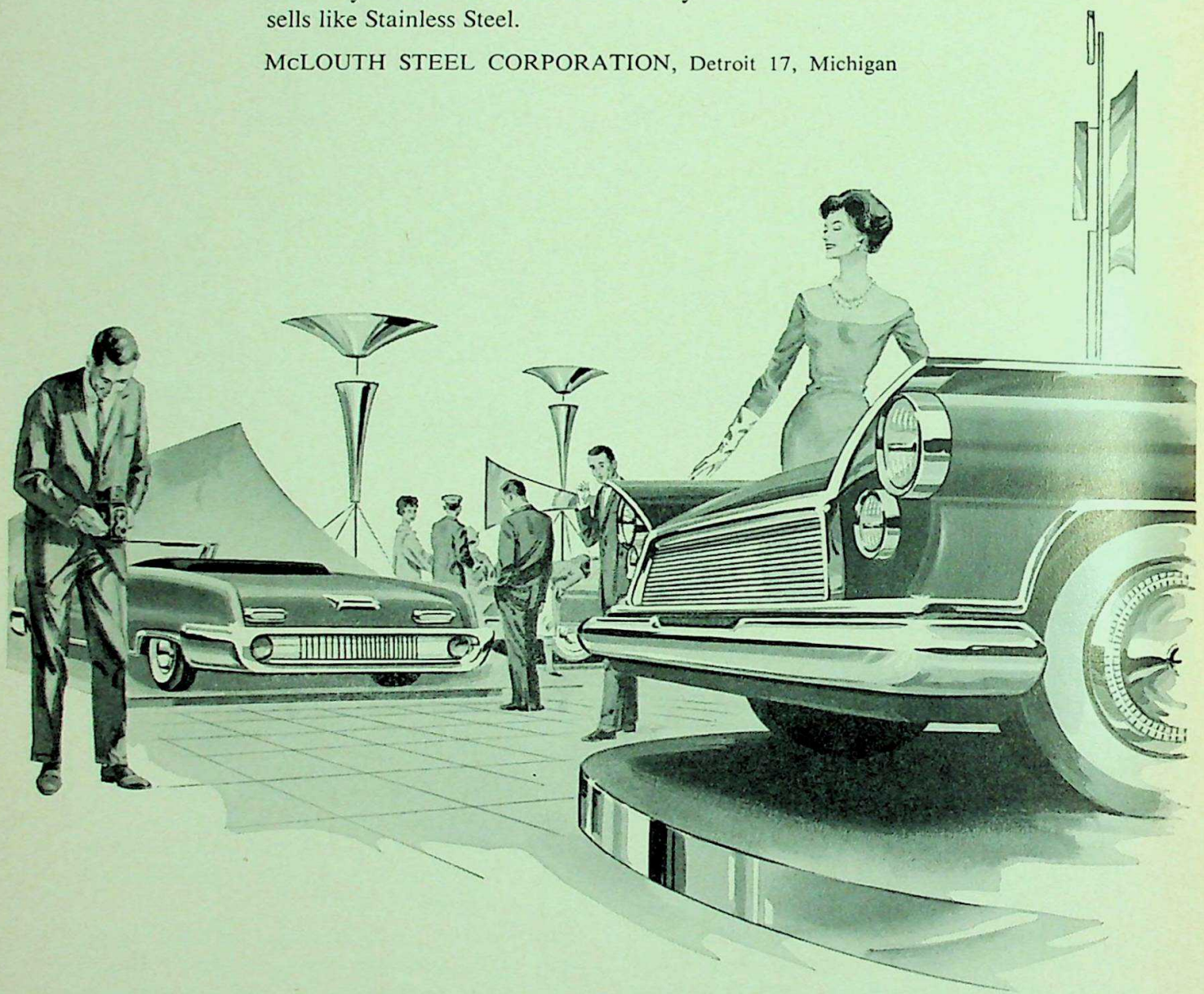
CHRYSLER • IMPERIAL

beauty is stainless steel

Look for the beauty of Stainless Steel on your new automobile. Its bright finish will make your car look better, stay in style longer and have a higher trade-in value.

No other metal offers the freedom of design and fabrication, economy of care and the durable beauty that serves and sells like Stainless Steel.

McLOUTH STEEL CORPORATION, Detroit 17, Michigan

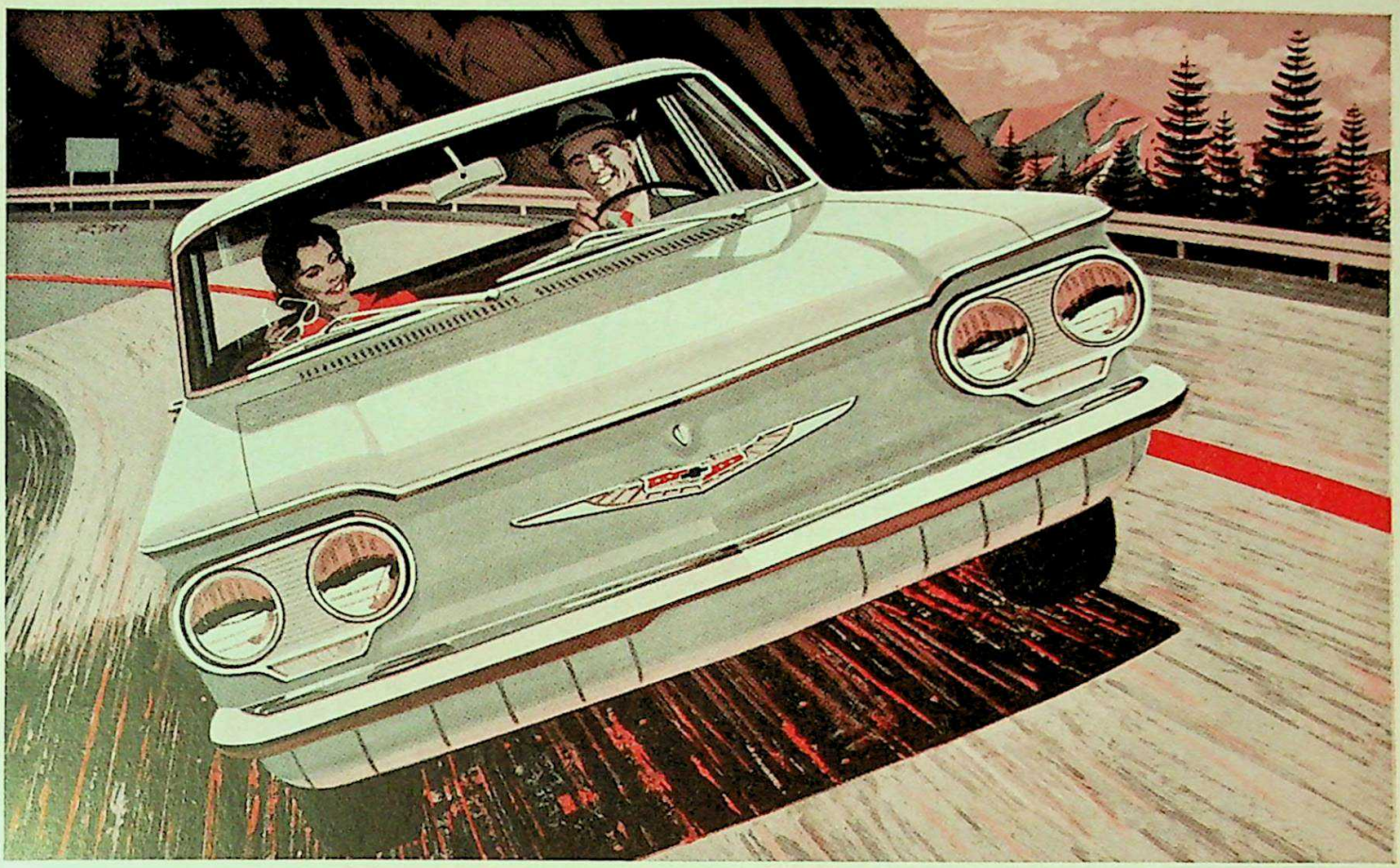


specify

McLOUTH STAINLESS STEEL

HIGH QUALITY SHEET AND STRIP

for automobiles



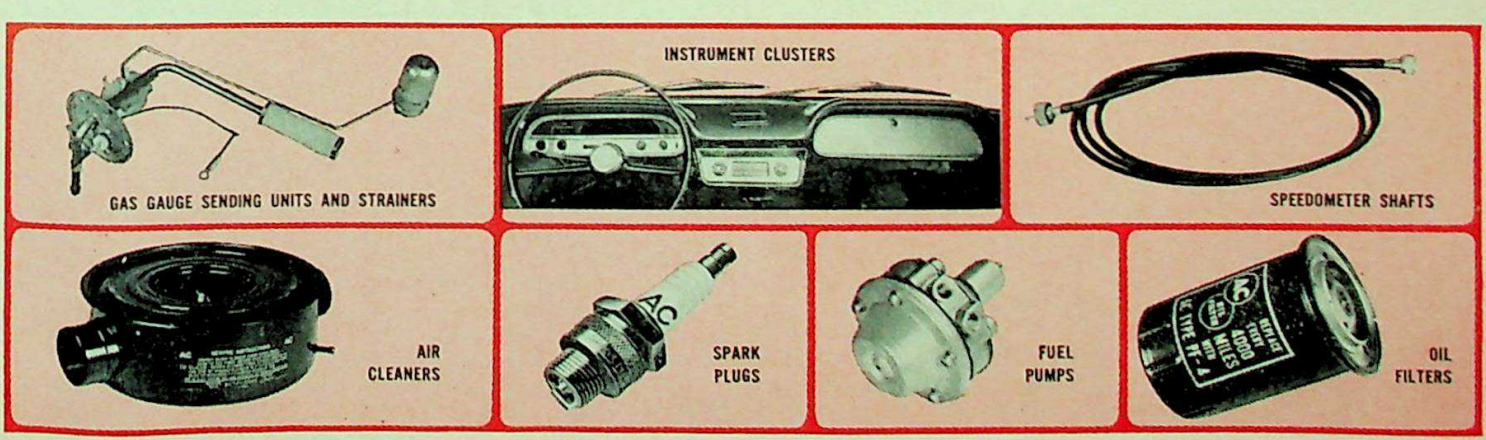
ACTION CHOICE *for the* NEW CORVAIR!

Chevrolet's revolutionary compact Corvair is America's newest choice for action. In designing this newest of new cars, Corvair engineers time after time made their own ACtion Choice... AC quality products. From road to roof, AC reliability is part of the new Corvair personality. Take a page from the book of Corvair engineers. For complex problems of new design . . . involving automotive, marine or industrial equipment... make your solution simple and effective. Specify AC quality products . . . products that help you sell!

AC Presents the Art Carney Show, NBC-TV, December 4

AC SPARK PLUG ⚛ THE ELECTRONICS DIVISION OF GENERAL MOTORS

FLINT—1300 N. Dort Hwy., CEdar 4-5611 **CHICAGO**—7074 N. Western Ave., ROgers Park 4-9700 **DETROIT**—General Motors Bldg., TRinity 5-9197 **PHILADELPHIA**—7 Bala Avenue, MOhawk 4-9722, BALA-CYNWYD **LOS ANGELES**—7666 Telegraph Road, RAymond 3-5171



NATIONAL BANK OF DETROIT

STATEMENT OF CONDITION, SEPTEMBER 30, 1959

RESOURCES

Cash and Due from Banks		$ 382,735,038.41
United States Government Securities		529,413,271.54
Other Securities		228,413,307.80
Federal Reserve Funds Loaned		11,500,000.00
Loans:		
Loans and Discounts	$ 610,238,474.66	
Real Estate Mortgages	141,861,223.40	752,099,698.06
Accrued Income and Other Resources		9,277,956.51
Federal Reserve Bank Stock		3,900,000.00
Bank Premises		15,286,893.11
Customers' Liability—Acceptances and Credits		4,495,723.37
		$1,937,121,888.80

LIABILITIES

Commercial Deposits:		
Individuals, Partnerships, and Corporations	$1,008,292,510.20	
Other Banks	142,314,388.58	
United States Government	124,575,240.95	
Other Public Funds	42,814,138.61	$1,317,996,278.34
Savings and Time Deposits		435,078,169.69
Total Deposits		$1,753,074,448.03
Accrued Expenses and Other Liabilities		26,102,362.44
Acceptances and Letters of Credit		4,495,723.37
Capital Funds:		
Common Stock ($12.50 par value)	$ 40,000,000.00	
Surplus	90,000,000.00	
Undivided Profits	23,449,354.96	153,449,354.96
		$1,937,121,888.80

United States Government Securities carried at $224,662,318.26 in the foregoing statement are pledged to secure public deposits, including deposits of $6,905,032.90 of the Treasurer, State of Michigan, and for other purposes required by law.

Member Federal Deposit Insurance Corporation

BOARD OF DIRECTORS

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Partner—Baldwin, Boos & Baldwin

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President

Prentiss M. Brown
Chairman—Mackinac Bridge Authority

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President and Treasurer—McLouth Steel Corporation

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Director—General Motors Corporation

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President—The Michigan Bell Telephone Company

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Chairman of the Board

C. E. Wilson
Director—General Motors Corporation

49th Annual Automotive Edition

MICHIGAN'S ONLY INDUSTRIAL AND FINANCIAL REPORTER

ESTABLISHED 1907

MICHIGAN MANUFACTURER and FINANCIAL RECORD

VOLUME 104 NOVEMBER, 1959 NUMBER 5

PUBLISHED MONTHLY BY THE MANUFACTURER PUBLISHING COMPANY
8543 PURITAN AVE., DETROIT 38, MICHIGAN
ENTERED AS SECOND CLASS MAIL MATTER AT THE POST OFFICE AT DETROIT, MICHIGAN

Nine-Month Car Output Up 50.8%; Higher Production Foreseen For 1960

BY HARRY A. WILLIAMS
Managing Director, Automobile Manufacturers Association

The automotive year now passing into the record books has been an unusually eventful and successful one for United States car and truck manufacturers.

H. A. WILLIAMS

Passenger car production during the first nine months totaled 4,330,698 units or 50.8 per cent higher than the 2,876,684 cars produced during the same period of 1958.

Trucks and motor coaches accounted for an additional 906,521 units, as compared with 612,791 such vehicles in the first nine months of 1958.

Combined motor vehicle output totaled 5,246,129 units, against 3,489,475 in 1958.

Fourth Quarter Doubtful

Earlier in the year, the industry was looking forward to a total passenger car output of about 5.5 to 6 million in 1959, plus approximately 900,000 trucks. The uncertainty of materials and parts supplies as a result of the prolonged strike in the steel industry, however, makes it impossible to estimate fourth quarter output.

It was more than a successful sales and production year. With a number of completely new car names and models announced, it was a year in which public interest in the industry's products was at a postwar peak.

The new economy cars will give U. S. automobile buyers a wide choice of models, and are expected to stimulate interest and sales throughout the year ahead.

Positive Signs For 1960

Forecasts of 1960 car production have ranged from 6.9 to more than 7 million units. Truck and coach output is expected to top the one million mark. These estimates are based on the availability of an adequate supply of parts and materials. Any prolongment or reoccurrence of the steel strike, of course, could significantly affect 1960's first quarter.

There are many positive economic signs that substantiate estimates for 1960.

Ownership and use of motor vehicles are at an all time high; the backlog of postponed purchases during the 1958 recession is expected to carry over for another year; multiple car households are being established at an increasing rate.

With the exception of the last two years when scrappage of motor vehicles almost equalled production, an average of 2.5 million vehicles are added annually to total registrations. The national registration tally now amounts to more than 70 million passenger cars and commercial vehicles.

Purchases deferred during the past two years will supplement the normal new-owner and replacement demand which is expected during the next year.

82 Million Drivers

Drivers have also increased in number. There are now more than 82 million licensed drivers throughout the U. S. Just two years ago there were 80 million.

Multiple car households have continued to increase, and now constitute 18 per cent of all car owning families. Ten years ago only 6.2 per cent of all U. S. households owned more than one automobile. The trend of urban decentralization and the growth of suburbia is expected to further increase the number of multiple car families.

Market researchers feel there is significance for the industry in the marriage boom now occurring. They feel a high percentage of real income is expected to be spent on consumer items by this new wave of younger families.

A number of other factors should contribute to further growth of the automotive market in the 1960 decade.

Widespread Economic Effect

Motoring will become more enjoyable and efficient. The new federal highway program will give the nation a network of 41,000 miles of interstate highways and also improve the remaining portion of the 3,500,000 miles of streets and roads in the U.S. Federal highway expenditures during 1959 are expected to total $10.5 billion.

The effects of growing automotive pro-

(Continued on Page 77)

Michigan Produces 28.3% Of U. S. Cars

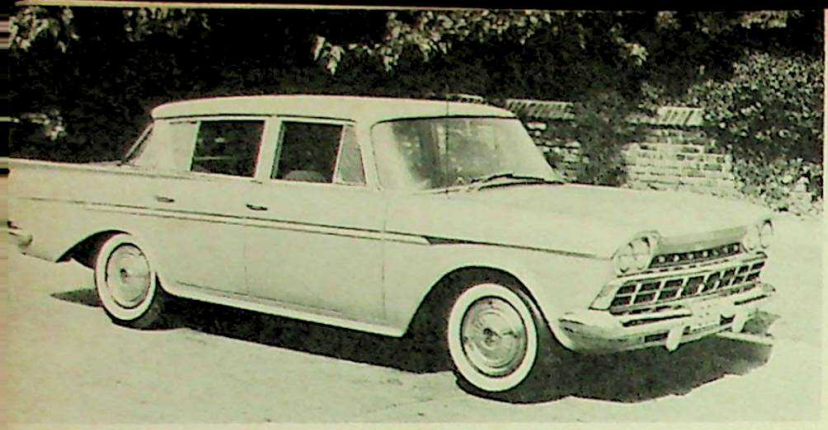
Michigan plants produced 1,573,000 passenger cars in the 1959 model year, or 28.3 per cent of the total U. S. production, it is disclosed in a compilation made by Ward's Automotive Reports, Detroit.

The 1959 model total for Michigan is 2½ times the output of the nearest competitor, Wisconsin, which produced 574,000, or 10.3 per cent.

But Michigan's percentage share dropped again in 1959 for the third year in a row, according to Ward's. In the 1958 model year, the state's percentage was 29.9 per cent of the total, and in 1957 it was 34.3 per cent.

Principal reason for Wisconsin's advance into second place in 1959 was the growing production of Rambler cars in Kenosha. Chevrolet also has an assembly plant in Janesville, Wis. Wisconsin supplanted California, which dropped to third place this year with production of 471,000 cars, or 8.5 per cent.

Others among the 19 states sharing in car output, as listed by Ward's and their percentages of 1959 model production, were: Missouri, 7.9; New Jersey, 6.5; Georgia, 5.8; Ohio, 5.5; Indiana, 3.9; Delaware, 3.8; New York, 3.3; Maryland, 2.9; Texas, 2.7; Kansas, 2.1; Illinois, 1.9; Minnesota, 1.7; Pennsylvania, 1.5; Kentucky, 1.4; Virginia, 1.2; and Massachusetts, 0.8.



Nine four-door models are included in the Rambler Six line and seven in the Rambler Rebel V-8 line for 1960, including sedans, station wagons, hardtops and the new three-seat station wagons.

Three-seat station wagons have been added to the Rambler line for 1960, with this body style available in both the Six and Rebel V-8 series. Captive-air tires are standard equipment.

New Ramblers Offer Sculptured Styling

Featuring sculptured styling, economy of operation, and a new three-seat station wagon, the 1960 line of Rambler Six and Rebel V-8 models were displayed publicly in dealer showrooms in mid-October.

The new models are slightly shorter than comparable 1959 models but have the same roomy interior dimensions, including five-foot-wide seats for six passengers. The more compact exteriors permit even greater parking ease and maneuverability.

Four Inches Shorter

While maintaining full seat, leg or luggage room, overall length has been reduced up to four inches. This was made possible by the design of the new bumpers and bumper guards. Wheelbase remains at 108 inches. Overall length of both the 1960 sedan and station wagon is less than 16 feet (189.5 inches), making the Rambler more than 1⅓ feet shorter than other top-selling cars.

Horsepower of the Rambler Six remains at 127, while the Rebel V-8 has been reduced to 200 horsepower for increased fuel economy. Optional power packs will increase the Six to 138 horsepower and the Rebel V-8 to 215. Regular grade gasoline is recommended for all models.

All lines blend with each other in the 1960 Rambler, giving an effect of symmetry with crispness. For example, the roof crease compliments the fender lines and the side spears, and those lines are accented by the double creases on the trunk lid and at the lower edge of the hood above the grille.

Tailgate Eliminated

The new three-seat station wagon added to the Rambler line has a rear-facing third seat which can be lowered in seconds to turn the space into cargo area. A unique feature of this model is the absence of a tailgate. Instead, it has a door hinged at the left side which swings completely open, allowing easier entrance for the third-seat passengers since there is no gate to climb over. The door can be locked either from the inside or outside, but for safety it can be unlocked only by using a key in the outside lock.

Captive-air tires as standard equipment on the three-seat station wagon eliminate the need of a spare tire.

Nine four-door models are included in the Rambler Six line and seven in the Rambler Rebel V-8 line. They include sedans, station wagons, hardtops and the new three-seat station wagons.

The Rambler's new styling includes slimmer roof pillars which increase the glass area by seven per cent for greater road visibility. Both the new windshield and rear windows are slanted at a greater angle to reduce wind resistance. With the slimmer and slanted front pillars, front-door entrance room is increased by as much as 3½ inches.

Two Piece Bumpers

The unadorned low and broad hood provides maximum road visibility as well as easy access to the engine compartment. The hood line flows smoothly into the front fenders.

Both the grille and the front and rear bumpers are made of two pieces to reduce possible repair costs. The grille is a heavy die-casting. Its widely spaced rectangular pattern adheres to a familiar Rambler styling theme, as does the block-letter nameplate positioned in an opening between the hood and the grille.

The modified and canted fins run from the leading edge of the rear door to the end of the fender where they angle downward to blend into the horizontal creases in the trunk lid.

All wheel openings flare out at the rear edges. The wide openings also contribute to the short turning diameter of slightly more than 37 feet.

The trunk lid, with new torsion-bar hinge, is high and flat to provide maximum cargo space. To facilitate loading, the trunk lid comes down to the edge of the bumpers, eliminating the need of lifting luggage or other articles over a "fence".

16 Exterior Colors

The tailgate in the regular station wagon models continues with a roll-down window. All station wagon models have the travel-rack mounted atop the rear part of the vehicle.

On all Super models there is a single side molding extending almost the full length of the car. On Custom models, a second molding is added from the rear part of the front fender to the middle of the rear door. The narrow space between the moldings carries the accent color.

Sixteen colors are available for 1960 models, including seven metallics, as well as 32 two-tone combinations. All are super-enamel paints.

An important mechanical change for 1960 is the use of bonded brake linings instead of riveted linings. Self-adjusting brakes are continued as a low-cost option.

Windshield wiper operation is improved with a more powerful motor. Blades are longer and have a three-inch overlap to clean the center of the windshield. The blades are 15 inches long.

Operation of the Rambler Six Flash-O-Matic transmission has been improved with the use of a free-wheeling sprag-clutch, similar to that used on Rebel V-8 models. It provides smoother and quieter shifts.

Choice Of Two Engines

The 127-horsepower Rambler Six has a compression ratio of 8.7 to 1, a piston displacement of 195.6 cubic inches and a torque rating of 180 at 1600 r. p. m. The Rebel V-8, at 200 horsepower, has a compression ratio of 8.7 to 1, a piston displacement of 250 cubic inches, and a torque rating of 245 at 2500 r. p. m.

A full range of power assists and comfort items is offered, including power steering, power brakes, power windows, non-slip differential and others.

Hoover Ball Plans Stock Split

Directors of Hoover Ball and Bearing Company, Ann Arbor, have proposed a 2-to-1 split of the company's common stock, subject to the approval of the stockholders at their annual meeting on Nov. 24. The shareholders also will be asked to authorize an increase in common stock from 750,000 shares of $10 par value to 2,500,000 shares of $5 par value.

Clifford H. Simmons, chairman of the board, pointed out that if approval is granted it is the present intent of the board to increase the dividend payable in January, 1960, to an annual rate of $1.20 a share on the presently outstanding stock, which compares with the current $1 rate. This would establish a quarterly dividend rate of 15 cents a share on the new shares.

Here is the 1960 Chevrolet Nomad station wagon with the new oval-shaped grille that spans the hood and encloses widely spaced twin headlamps at the outer edges.

One of 19 models being offered by Chevrolet is this two-door Biscayne sedan. Two additional lower-priced models in the Biscayne series have been designated as the Fleetmasters.

Restyled Chevrolets Stress Economy

Nineteen models, including the new lightweight, rear engine-mounted Corvair and the Corvette sports car, were unveiled by Chevrolet dealers in their showrooms early in October.

A distinctive new appearance, added comfort and increased economy of the most popular V8 engine, are among the outstanding features of the four series of the 1960 conventional Chevrolet line.

Body types offered in the Impala series include a four-door sedan and sport sedan, sport coupe and convertible. In the Bel Air series, there are two and four-door sedans, sport coupe and sport sedan. In the Biscayne series are two and four-door sedans and a utility sedan. The Station Wagon series offers the Nomad, Parkwood, Kingswood and two choices of the Brookwood.

Two Economy Biscaynes

Following by less than ten days the introduction of the new Chevrolet lines for 1960, Edward N. Cole, Chevrolet general manager, early in October announced the addition of two new lower-priced models designed for those persons who seek "full size, low cost, durable and economical transportation."

The newcomers are the Biscayne Fleetmasters, to be built in both two-door and four-door sedans. They carry factory list prices of $2,026 and $2,076, respectively. This is $30 lower than the prices for comparable models in the regular Biscayne series.

"In addition to the lower initial price, they will provide exceptional operating economy when equipped with either the Hi-Thrift six cylinder or the Turbo-Fire V-8, which this year was re-engineered for superior gas mileage," Cole said.

All passenger car series have been completely restyled. There is a fresh new appearance to the exteriors, and the interiors are roomier and offer new elegance of upholstery and sidewall treatment.

Most notable exterior design changes occur in the frontal and rear areas. An oval-shaped grille spans the hood and encloses widely spaced twin headlamps at the outer edges. The wing overhang at the rear has been revamped to widen the trunk opening and lower the loading sill. An ensemble of circular tail-lamps replaces the former tear-drop configuration. The modified wings now present a flat line across the top of the rear deck.

The front compartment transmission tunnel has been significantly reduced in width and height to benefit roominess. The frame has been reinforced and new rubber-insulated body mounts give a quieter ride.

In addition to the new economy in the Turbo-Fire V8, the 1960 Chevrolet power packages include a six-cylinder engine and six other V8 choices. Overall economy and engine performance in the normal driving ranges has been improved by a new low-lift camshaft with reduced valve overlap and a recalibrated carburetor on the new economy Turbo-Fire V8.

Prices Are Unchanged

New tires have been made more durable and tread life has been increased 12 per cent by the use of new synthetic rubber and a change in the proportion of synthetic and natural rubber. The higher energy-absorbing tread material also promises less impact on bumps, reduced tire squeal on turns, and surer traction.

Brakes have been improved and require less pedal pressure. The parking brake now carries a pop-out release lever.

Color choices in the 1960 conventional passenger line include 13 solids and 10 two-tone combinations.

Prices in the 1960 six-cylinder models are the same as for 1959, except in the lowest cost Biscayne series, where there has been a slight upward adjustment to cover the cost of former optional items that have been made standard. V8 models have been reduced $10 in factory list price with some 1959 accessories added at no extra cost.

Ely Retires as Young President

Retirement of Neil D. Ely as president of Young Spring & Wire Corp., Detroit, was announced in mid-October by the board of directors. Ely, who has been with the Young corporation for 35 years, will continue to serve as a member of its board of directors and on its executive committee.

S. R. Baker, chairman and chief executive officer, announced that Irving R. Seely had been designated executive vice-president. Seely joined Young earlier this year as vice-president of operations. Prior to joining Young, he served as executive vice-president of the Kawneer Company, Niles.

PLANS $10 MILLION CENTER

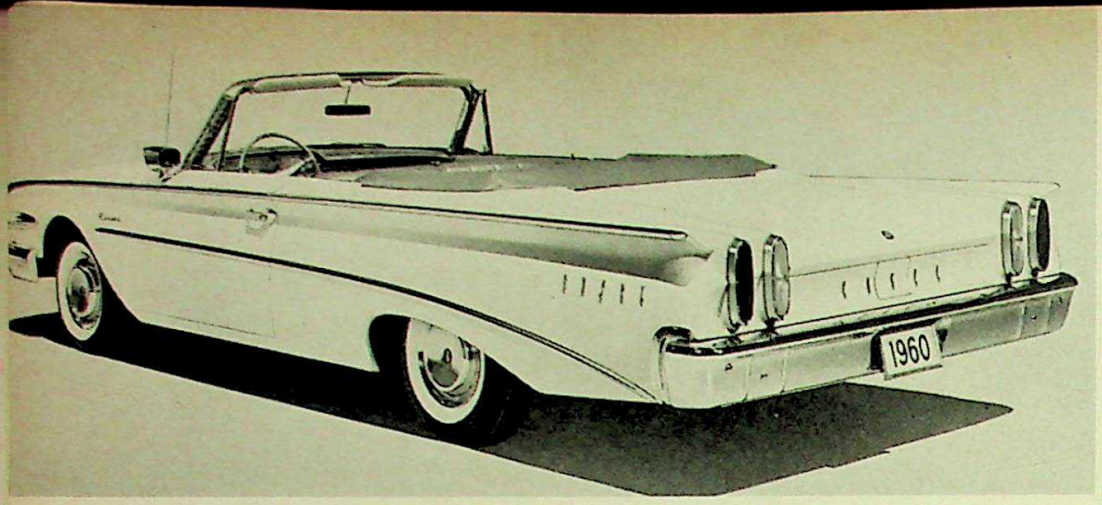
A proposal to erect a $10,000,000 regional shopping center at Joy road and Greenfield has been submitted to Detroit City Council by Joseph Panacki, Detroit builder. Plans call for construction of ten 2-story apartment buildings, a bowling alley, medical clinic, and a major commercial building housing a supermarket and other retail stores.

★ ★ ★

Shown here is the 1960 Chevrolet Impala Convertible, showing the new flatter rear deck as the wing overhang has been revamped to widen the trunk opening and lower the loading sill.

An ensemble of circular tail-lamps replaces last year's tear-drop configuration.

★ ★ ★



★ ★ ★

One of the most changed cars for 1960, the Edsel has new styling, a new body, wide tread ride, and sells competitively with the popular three. The Ranger convertible, shown here, is one of seven models which can be bought in a wide range of engine and transmission combinations for top economy or high performance.

Other models include two and four-door sedans, two and four-door hardtops, and two Villager four-door station wagons.

★ ★ ★

Seven Models In Two New Edsel Series

Priced competitively with top models of the "popular three", the 1960 Edsel features completely new styling, a new wide-tread, long-spring ride—providing Edsel with its third distinctive appearance change in the three years it has been on the market.

Edsels are offered in two series for 1960—the Ranger and the Villager. They include the Ranger two and four-door sedans, the two and four-door hardtops, and the convertible, and the Villager six and nine-passenger station wagons. Both wagons are four-door models.

Over Five Inches Longer

The new Edsel is one inch lower, almost three inches wider and 5½ inches longer than the 1959 model. The tread has been widened by more than two inches at the front wheels and 3.6 inches at the rear, to 61 and 60 inches respectively.

More interior dimensions have been increased for greater passenger comfort. Shoulder room has been increased 2.8 inches and 4 inches, front and rear. Hip room is up 1.8 inches in front and 2.4 inches in the rear seat. Rear seat legroom is 1.2 inches longer.

Increased road tread, together with a lower center of gravity, make the new Edsel one of the most road-hugging cars in the industry. Because of this stability, an Edsel would have to be tilted at an angle of 62 degrees, or have its outside wheels lifted more than four feet off the pavement, for the car to tip over.

Dogleg Is Eliminated

The new body for 1960 has eliminated the "dogleg" by moving the windshield post forward ten inches to allow the driver or front seat passenger to enter and leave the car without hazarding a bumped knee. Visibility has been increased 17 per cent in the front windshield and 63 per cent in the back window.

Wheelbase of the station wagon has been increased two inches to equal the passenger car 120-inch wheelbase. As a result, Edsel wagons are much more spacious. With all three seats installed, there still is more than a yard of floor space behind the third seat for storage. If the vinyl-covered foam rubber cushions that make up the third seat are removed, there are 70.5 inches of floor space available.

The Edsel buyer has a choice of three engines and three transmissions, all improved over their 1959 counterparts. Basic engine for all Edsels is the 292 cubic-inch 185-horsepower Ranger V-8, which operates on standard gasoline and incorporates a number of improvements for greater economy.

Choice Of Transmissions

High performance is the 300-horsepower, 352 cubic-inch Super Express V-8, which operates on premium fuel. This extra cost option can be ordered on any Edsel. For the buyer who wants maximum economy, Edsel offers its 223 cubic-inch, 145-horsepower, six-cylinder engine.

The transmission lineup includes the dual range Dual-Power Drive and the two speed Mile-O-Matic automatics, and a manual gear box. The Ranger V-8 can be combined with either Mile-O-Matic or three-speed manual transmission. The Super Express may be ordered with the Dual-Power Drive or Mile-O-Matic transmissions. The Economy Six comes with the Mile-O-Matic or manual transmissions.

The new styling is characterized by simplicity and good taste in ornamentation. A stainless steel strip outlines the leading edge of the fenders and flows back to the outswept finial. Outboard of the grille and recessed in these strips are the parking lights.

Vertical Grille Discarded

The center of the die-cast honeycomb grille modifies Edsel's past vertical treatments into a modernistic hourglass shape which is embellished by the Edsel emblem. The rear view of the 1960 cars also has a different treatment than former models. Tail lights and backup lights are set in upright oval nacelles which are contoured in the sheet metal of the upper quarter panel.

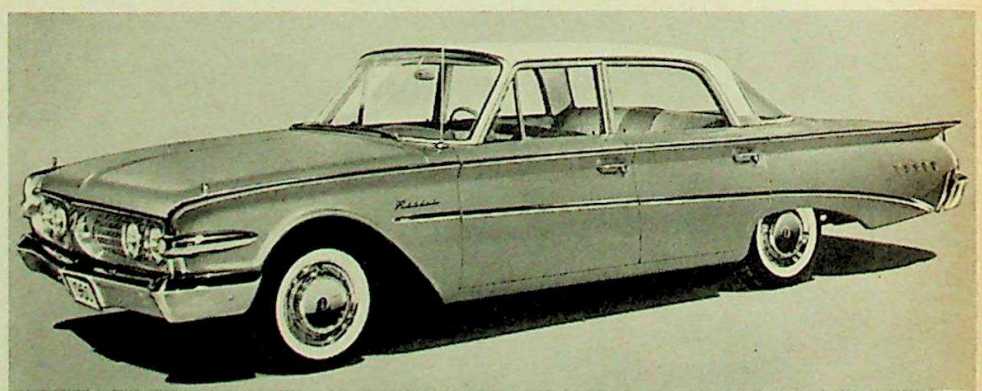
Passenger cars are styled in two contrasting roof lines. The Ranger two-door hardtop has a unique "fast-back" treatment with an unbroken flow of line on the roof and rear window areas. Other models have a more pronounced wrap-around effect in the rear window.

The hood of the Edsel is the widest in its history, and extends to the crowns of the fenders. The wide hood design not only makes the engine compartment much more accessible for service personnel but results in stronger fenders.

Provide Improved Ride

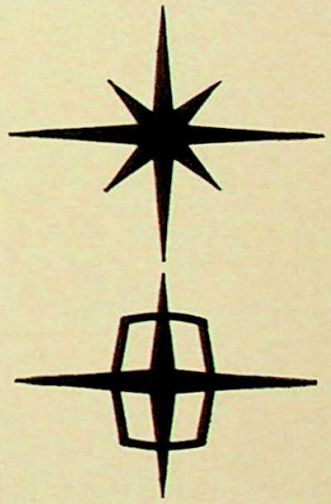
Edsel's new design has greatly improved its big-car ride. This has been made possible by: (1) Widening the tread; (2) lengthening the frame; (3) lengthening the rear springs, which now are believed to equal the longest, widest springs on any 1960 passenger car; (4) the rear springs, which are five feet long, are attached to the axle off center so that the shorter length of spring is ahead of the axle. This makes the front part of the spring stiff to prevent windup during acceleration while the rear part is free to flex for better riding.

Brake lining areas have been increased more than 17 per cent on passenger cars, and 28 per cent on station wagons. The self-adjusting brakes, standard on all models, have unique custom tailored linings. A specially blended compound, riveted lining is used.



Fresh styling and roomy interiors characterize the Edsel for 1960. Wide tread design and extra long springs assure a smooth, stable ride. The former vertical grille treatment has been discarded. Shown here is the Ranger four-door sedan.

55,000,000 REASONS WHY FORD MOTOR COMPANY BUILDS SO MANY DIFFERENT CARS



If you were to interview all of the 55-million car owners in America, it is doubtful that you would find as many as a dozen people with precisely the same taste in cars. Each of us has his, or her, own personal preference as to models, trim, colors and features.

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MICHIGAN PRESS ASSOCIATION

November, 1959

EDITOR'S NOTE: Instead of the editorials customarily carried on this page, we are presenting in this 49th Annual Automotive Edition some excerpts from statements made by leaders in the automotive industry at press previews, dealer shows and other gatherings prior to or at the time of the public introduction of the 1960 model cars and trucks.

Henry Ford II, president of Ford Motor Company, predicts 1960 sales at between 6,700,000 and 7,000,000 cars, of which 500,000 would be foreign imports. He estimates the Falcon, Valiant and Corvair will reduce foreign penetration somewhat from this year's 600,000.

Edward N. Cole, GM vice-president and general manager of Chevrolet Motor Division, says the 1960 U. S. auto market will be "at least 6,900,000" and the truck market 1,100,000, including imports of both cars and trucks. In such a market, he said, Chevrolet expects to sell 1,500,000 conventional cars, 300,000 Corvairs and 365,000 trucks. This would give Chevrolet 1960 sales of 2,165,000 cars and trucks. If achieved, it would topple the company's previous all-time sales high of 2,066,337 set in 1955.

J. O. Wright, Ford Motor vice-president and general manager of the Ford Division, points out that in 1960 Ford dealers "are offering cars covering price classes representing nine out of ten cars sold".

Harold E. Churchill, president of Studebaker-Packard Corporation, expects his company to enlarge its sales total in 1960 by 33 per cent which would give it three per cent of the domestic new car market. This would mean a volume of 175,000 to 180,000 for Studebaker-Packard.

L. L. Colbert, president of Chrysler Corporation, forecasts retail U. S. sales in 1960 of between 6,500,000 and 7,000,000 cars, up from this year's estimated 6,400,000. He believes sales of U. S. built economy cars will reach 1,250,000 in 1960, and that import car sales next year will drop to 500,000 from the estimated 600,000 for 1959.

S. E. Knudsen, GM vice-president and general manager of Pontiac Motor Division, in announcing the 1960 models, said the "overall market for 1960 looks less puzzling today than it did six months ago. The auto boom that got under way less than a year ago, according to our economists, may make total sales for 1960 hit 6,900,000 cars." In the 1959 model production run, Pontiac produced 383,320 automobiles to occupy first place in the medium-priced field. According to preliminary estimates, "addition of the Ventura line will help widen Pontiac's market to around 425,000 units." Sales in 1959 are expected to hit 405,000.

Sponsors Advertising Contest Promoting Michigan

The Industrial Marketers of Detroit, a chapter of the National Industrial Advertisers Association, has announced a special competition open to Michigan advertisers and advertising agencies conducting public relations and advertising programs directly or indirectly promoting the State of Michigan.

Industrial organizations, business firms, public utilities or their advertising agencies that have planned or are planning activities promoting the State of Michigan are urged to send proofs of these advertisements or clippings of public relations activities to the Industrial Marketers of Detroit, 7410 Woodward avenue, Detroit 2.

Presentation of the awards will be made as part of the 1960 Michigan Week, May 15-21, 1960, according to Carl B. Anderson, merchandising manager of Crawford Door Co., who is responsible for the IMD's public service and award activities.

James M. Roche, general manager of Cadillac Motor Car Division and vice-president of General Motors, sees U. S. new car sales in 1960 rising to 6,900,000, up about 600,000 over 1959, but foreign car sales dropping from 600,000 to 500,000 in the next year. He believes that 1960 will be another good year for Cadillac and the industry. The division's 1959 output was 17 per cent higher than in 1958, for its third best model year in history. He estimates 1960 output of Cadillacs at 156,000 against 154,000 in the 1959 model year.

Philip J. Monaghan, vice-president of General Motors and general manager of the GMC Truck & Coach Division forecasts a total of approximately 990,000 domestic retail deliveries of new trucks in the industry this year, and an even stronger market in 1960 when an estimated 1,100,000 retail deliveries will be made. GMC's domestic sales this year will amount to about 75,000 units, and the Division is aiming for a strong increase in its market penetration in 1960, he said.

George Romney, president of American Motors Corporation, predicts a production in 1960 of more than 500,000 Rambler cars, and "that total could go higher", he added. He believes that there will be a 7,000,000 car market in 1960, including about 500,000 imports. Romney forecasts a total smaller car market for 1960 of 2,250,000, of which he says "1,750,000 will be compact cars," and Rambler will outsell those of any other single company.

Harry E. Chesebrough, vice-president of Chrysler Corporation and general manager of its Plymouth-De Soto-Valiant Division, believes that the new U. S. economy cars will stimulate sales of U. S. standard-sized automobiles during the 1960 model year. He predicts that 1960 will be the second best sales year in the industry's history, second only to the record year of 1955 when sales totaled 7,200,000 cars. Four out of every five car sales in the U. S. in 1960 will be standard full-sized cars, he states.

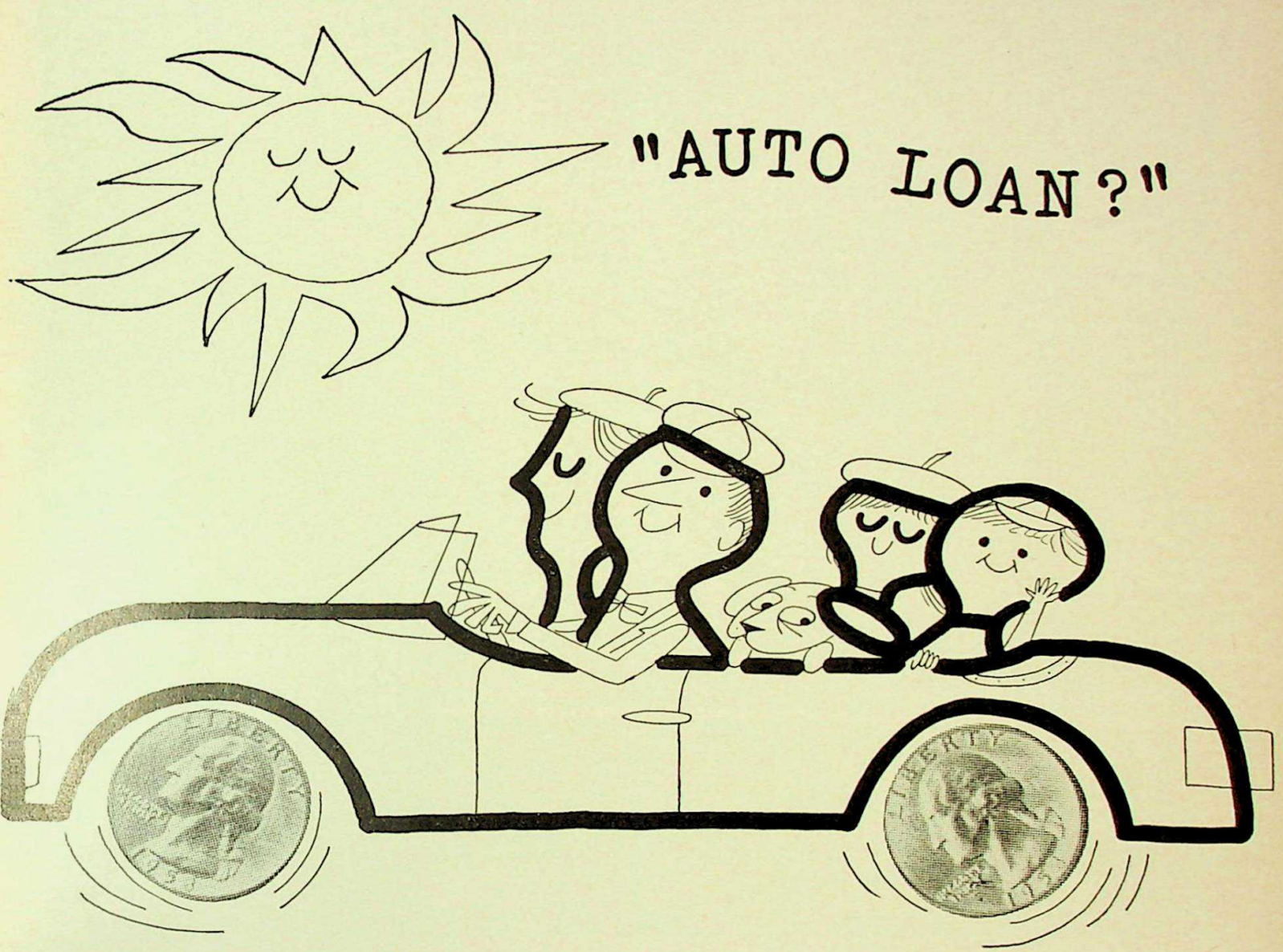
The new American-built compact cars will have little effect on the market in which Buick sells, **Edward D. Rollert**, general manager of Buick and vice-president of General Motors, predicts. "I think the new compact cars will affect the foreign import market far more than they will affect us," Rollert said. He estimated Buick's sales for the calendar year 1959 at between 280,000 and 290,000 cars, and added "certainly we can sell 20 per cent more cars in 1960 than we did this year".

Ben E. Mills, Ford Motor Company vice-president and general manager of the M-E-L Division, calls the current market revolution "an explosion into variety, to fill the needs of people who want and expect to get specialized, different, more personal cars." "M-E-L Division is in the vanguard of this exciting development," he said. "With its variety of fine cars, flexibility in decision and action inherent in our management structure, we are confident that we will have an increasingly vigorous role in the market during 1960 and the years to come."

In spite of the new compact cars being offered for 1960, **Jack F. Wolfram**, Oldsmobile Division general manager and GM vice-president, forecasts a rising medium-priced market for 1960. He expects total car sales in 1960 to hit 6,900,000, including imports, which would be a ten per cent gain over 1959. For Oldsmobile, he sees sales rising by 13 per cent in 1960.

Roy Abernethy, vice-president of automotive distribution and marketing, American Motors Corporation, points out that at the start of the 1959 model season AM had as its sales objective six per cent of industry. A year later, he reported: "We have reached 6.55 of industry to date, and our sales will be in the area of 350,000 cars. We now are asking our dealers to get eight per cent of industry for 1960."

(*Continued on Page* 95)



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Aluminum's Use For Auto Trim Soars

Automotive stylists have continued to find increasing uses for aluminum trim in cars with the result that more than 150,000,000 pounds of the light metal have been employed in the last four years for these uses alone, Robert E. Conlee, automotive development engineer for Aluminum Co. of America, told a recent Detroit meeting of the American Society of Body Engineers.

Conlee said that since 1956, when aluminum trim use averaged a mere 2.8 pounds a car, the rise has been so rapid that it now is estimated at ten pounds per car. Total use of aluminum in a modern car now averages above 50 pounds.

About 70 per cent of the aluminum sold for trim use on cars is for exteriors, Conlee said. He predicted there would be a sharp rise in the use of the light metal if aluminum bumpers make their appearance on automobiles.

Some reports indicate that at least two cars are considering the latter possibility on their 1961 models.

The aluminum grille of Chrysler's Valiant typifies the allure aluminum holds for the auto industry. The young lady is pointing to aluminum ingot representing the tonnage increase in aluminum trim during 1957, 1958 and 1959. Aluminum trim tonnage for the past four years totals almost 150 million pounds.

NAMED PARK PLANNER

Edward Mallonen, who was graduated from the school of landscape architecture and urban planning at Michigan State University in 1950, has been appointed park planner for the Huron-Clinton Metropolitan Authority.

VOTES EXTRA DIVIDEND

An extra dividend of 25 cents a share on the common stock, in addition to the usual quarterly dividend of the same amount has been declared by directors of Michigan Seamless Tube Co., South Lyon, payable Nov. 17 to stockholders of record on Nov. 2.

Detroit News Plans New Facilities

The Evening News Association, publishers of The Detroit News, has petitioned the Detroit city council to close all streets and alleys in a six-block area on the south side of East Jefferson avenue to permit land clearance for a new newspaper plant.

The proposed site is bounded by Brush, Atwater, St. Antoine and Jefferson avenues. Buildings along its Jefferson boundaries currently are being razed as part of the East Jefferson widening project which will accommodate the southern terminus of the Chrysler Expressway.

All parcels of real estate within the area have been either purchased or optioned by The News through Silloway & Co., Detroit realtors. The first parcel was acquired in June, 1957.

"No details regarding either the project or the construction timetable are ready for announcement at this time," said Warren S. Booth, president and publisher of The Detroit News.

He did reveal, however, that preliminary plans for the new newspaper plant are being prepared by Giffels & Rossetti, Detroit architects and engineers, and William Ginsburg Associates, New York consulting specialists in newspaper production facilities.

The present Detroit News building on West Lafayette was opened on Oct. 15, 1917.

Detroit Steel Signs USW Contract

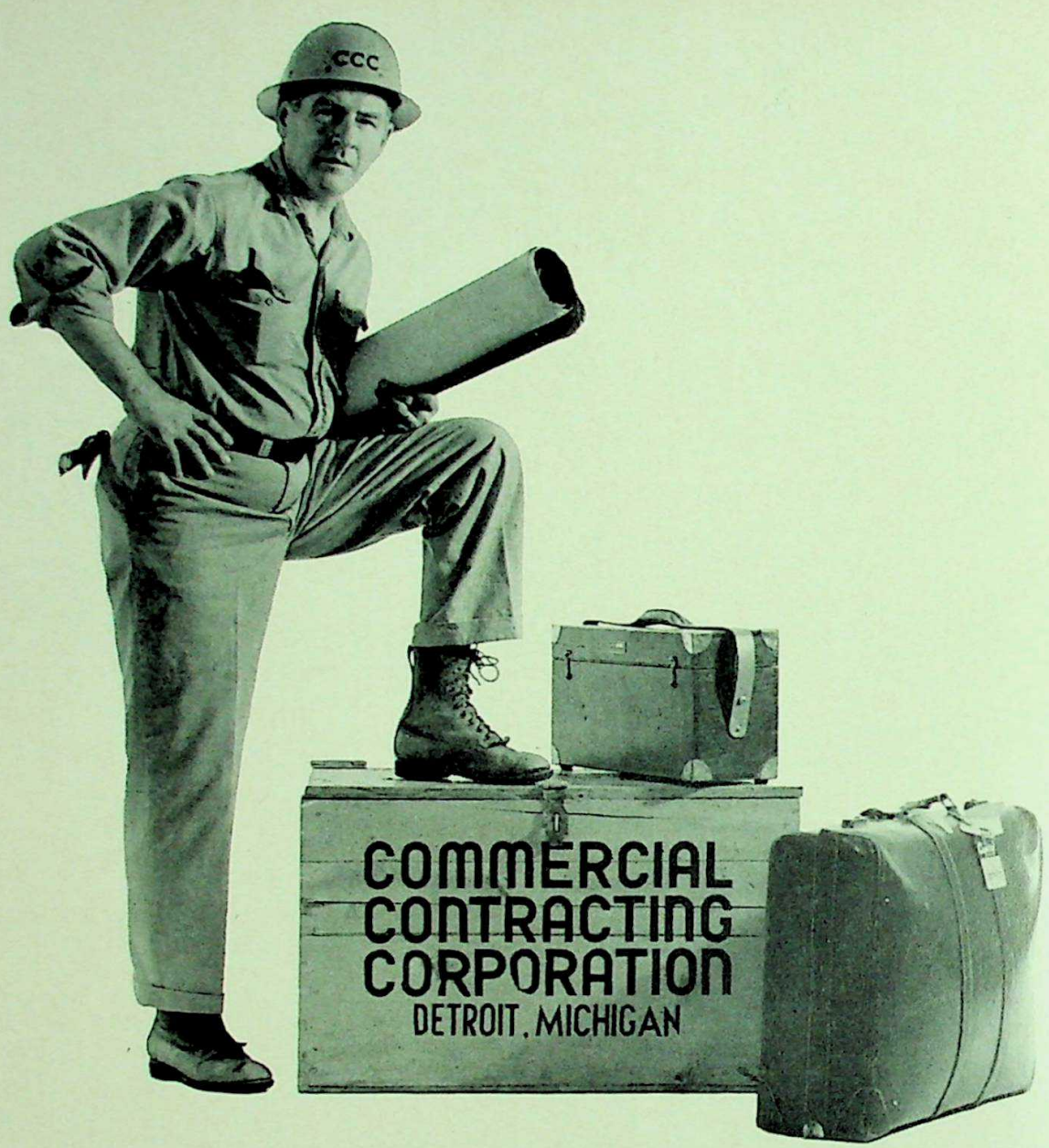
Following by about 24 hours after the signing of the initial contract by Kaiser Steel Corp., Detroit Steel Corporation on Oct. 27 also signed a contract with the United Steel Workers union, patterned after the earlier Kaiser settlement. Detroit Steel, however, had been operating since the nationwide strike under an extension of its former contract.

David McDonald, USW president, said terms of the Detroit Steel settlement were virtually the same as those reached with Kaiser — 22½ cents an hour in wages and benefits. The contract took effect on Nov. 1, and will expire June 30, 1961.

Detroit Steel has its main plant in Portsmouth, Ohio, as well as finishing facilities in Detroit and Hamden, Conn. General offices are in Detroit.

Detroit Steel employs about 4,300, only 350 of whom are USW workers in the Detroit cold-strip mill and warehouse. It ranks 16th in the industry on the basis of its rated annual ingot capacity of 1,500,000 tons.

Bohn Aluminum & Brass Corporation, Detroit, has acquired the inventories, machinery and equipment, and all rights to the going business of Port Everglades Steel Corporation, at Fort Lauderdale, Fla.



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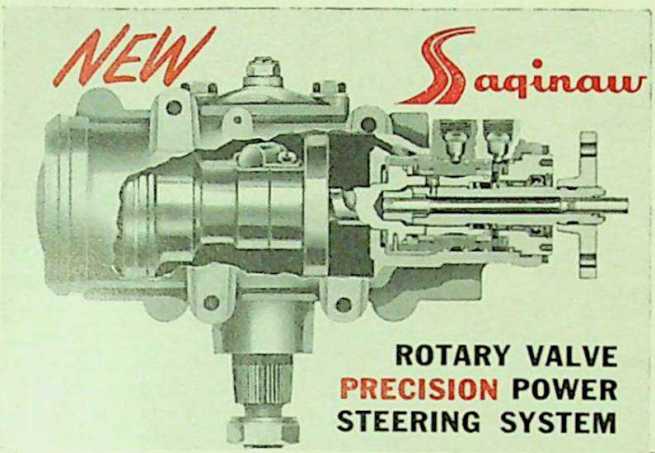

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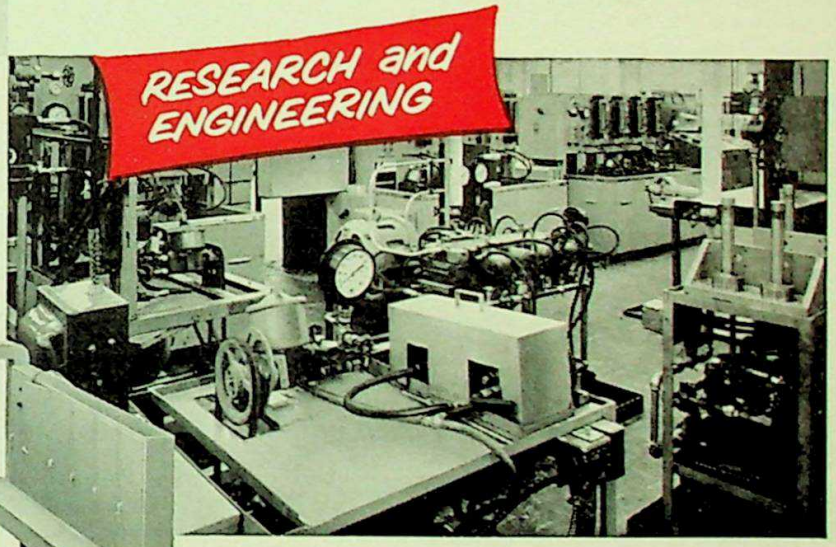

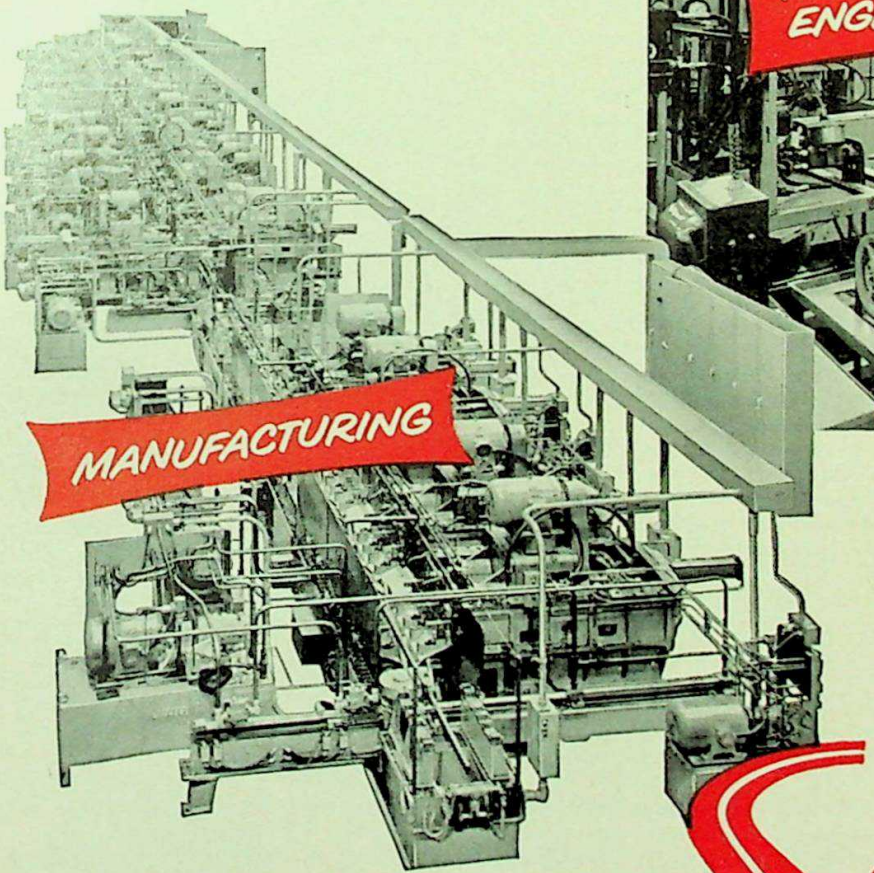

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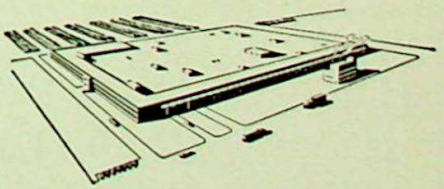

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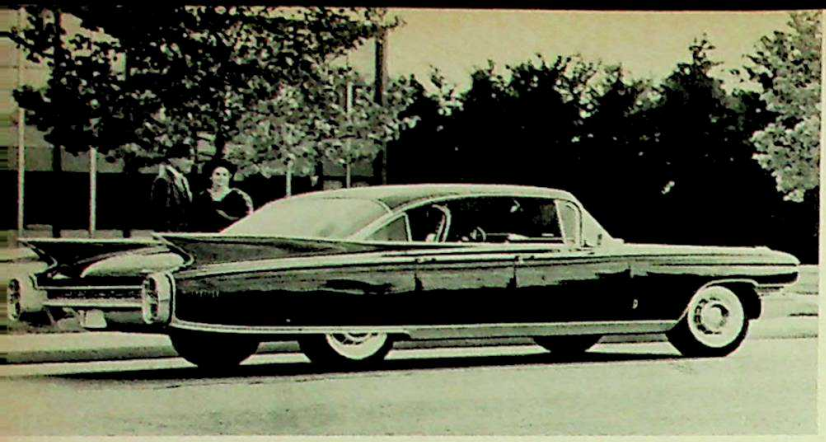

Emphasizing the handsome body shape and careful attention to detail, the Fleetwood Sixty Special Sedan typifies the simplicity of design so evident in the 1960 Cadillac line. The side view is highlighted by nine small vertical louvres in body color and edged in chrome below the tail fin.

This is the Cadillac convertible for 1960. Built on a 130-inch wheelbase, all models but the Series Seventy-Five measure 225 inches in length. Horsepower of Cadillac's two engines remains at 325 and 345. (A picture of the Cadillac 1960 Sixty-Two sedan was carried in the October issue.)

Restrained Tail Fins On Cadillacs

In announcing the 1960 Cadillac line, James M. Roche, Cadillac general manager and GM vice-president, said: "The newness of the 1960 Cadillac is emphasized by its handsome lines and elegant simplicity of design. Creating this new look are the traditional but restrained tail fins which reflect the influence of the Eldorado Brougham."

In general, the 1960 Cadillacs feature a new front end with a wider and lower appearance which results from the new grille, new bumper and new parking and driving lights, a new rear bumper with distinctive lighting arrangements, important developments in mechanical operation which contribute to smoothness and quietness of operation, a better braking system, and new luxurious interiors which provide greater comfort and convenience.

Offers 13 Models

For 1960, Cadillac is offering 13 models in three standard and one custom series. All are basically unchanged in dimensions from last year's models.

In the series 62, there are a sedan, a four-window sedan, coupe, convertible Coupe De Ville, Sedan De Ville, four-window Sedan De Ville, Eldorado Biarritz and Eldorado Seville. In the Fleetwood 60 Series, there is a special sedan, with a sedan and limousine in the Fleetwood 75 series. Topping the entire line is the luxurious Eldorado Brougham.

The front end of the Brougham is all new with new bumper and grille. The grille features jewel-like ornaments pioneered by Cadillac. Of smaller design, they sparkle from a field of horizontal and vertical bars. The sculptured design of the side panels is complemented by the flaring out of the lower door panels and lower rear quarter. Rear styling also is new with a new bumper and lighting arrangement exclusive to the Brougham.

On the other 12 models, the wider and lower appearance of the new front grille is achieved by the addition of a fine horizontal grille bar between each row of jewel-like ornaments and the elimination of the center bumper bar. The horizontal bars have been finished on a slight angle to provide gleaming highlights in the delicate design.

At each end of the front bumper is a broad, visor-like, chromed housing with two parking and directional signal lamps recessed below. On the hood is a new slimmer V and crest.

The front fender crown moldings, in addition to concealing the junction between the fender and hood, have a new chrome ornament with a small amber light on the rear face which serves as a turn signal indicator for the driver.

The new side silhouette is achieved with the lower, more restrained tail fin design which gives the effect of one long, sweeping line from the hood through the entire length of the car. The fins again carry the taillamps which provide excellent side illumination.

Unique Taillight Design

A single, finely tapered chrome molding extends rearward from the front wheel opening to the bumper housing on the Sixty-Two coupe and sedan, the Coupe and Sedan De Villes and the Fleetwood Seventy-Five models On the Series Sixty-Two models only, a small rectangular contemporary plaque containing the name "Cadillac" is located on the front fender just to the rear of the headlamps.

The Fleetwood Sixty Special uses even less trim, the exceptions being nine small vertical louvres in the body color and edged in chrome below the tail fin.

The Eldorado Biarritz and Seville have a thin chrome side molding that accentuates the shape and lines of the body contours.

New wheel discs feature the Cadillac medallion within circles of brushed chrome or optional white or black baked enamel.

103 Interior Combinations

Just below the contoured taillights in the trailing edge of the fins are new vertical, oval, chrome bumper housings each containing two circular lamps with concave lens. The lower lamp with a red reflector lens serves as a taillight, stoplight and directional signal light operating in unison with the taillight in the fin itself. The upper lamp is the back-up light.

On all models except the Sixty Special, Biarritz and Seville, the cove molding area between the deck lid and the rear bumper contains a horizontally ribbed decorative section.

Fifteen basic colors are available throughout the line with five additional exclusive finishes for the Biarritz and Seville. In the interior, there are 103 distinctively newly styled combinations featuring Florentine leathers and harmonizing fabrics.

Instead of a horn ring, the new steering wheel presents a brushed chrome horn bar that has been contoured into each spoke for easy operation by either hand.

Another feature giving added driver convenience is the improved spacing between the accelerator and brake pedals. This results from engineering design of a new, more compact Hydra-Matic transmission housing. It is both narrower and lower.

Better Braking System

Increased rear brake cooling, provided by new finned and extended rear drums, makes possible the use of larger rear wheel brake cylinders. This reduces front brake loads and gives better cooling at all four wheels. The brakes adjust automatically as needed when the car is operated in reverse gear. This compensates for lining wear and eliminates brake adjustment.

Another Cadillac first is a vacuum released parking brake. With the engine running, the brake automatically is released as the car is put in gear.

Contributing to Cadillac's new higher standards of smoothness and quietness of operation are: A new low frequency engine mount made of spring steel which smoothes out vibrations; a new cantilevered spring on the rear suspension lower arm which reduces road noises and vibrations; and a temperature controlled fan on all air conditioned cars which eliminates fan noise for most driving conditions.

In the two Cadillac power plants, the compression ratio remains at 10.5 to 1 and the horsepower is unchanged. A 345 horsepower engine powers the Biarritz, Seville and Brougham, with a 325 horsepower engine for all other models. The 345-horsepower engine can be had as optional equipment in all other models.

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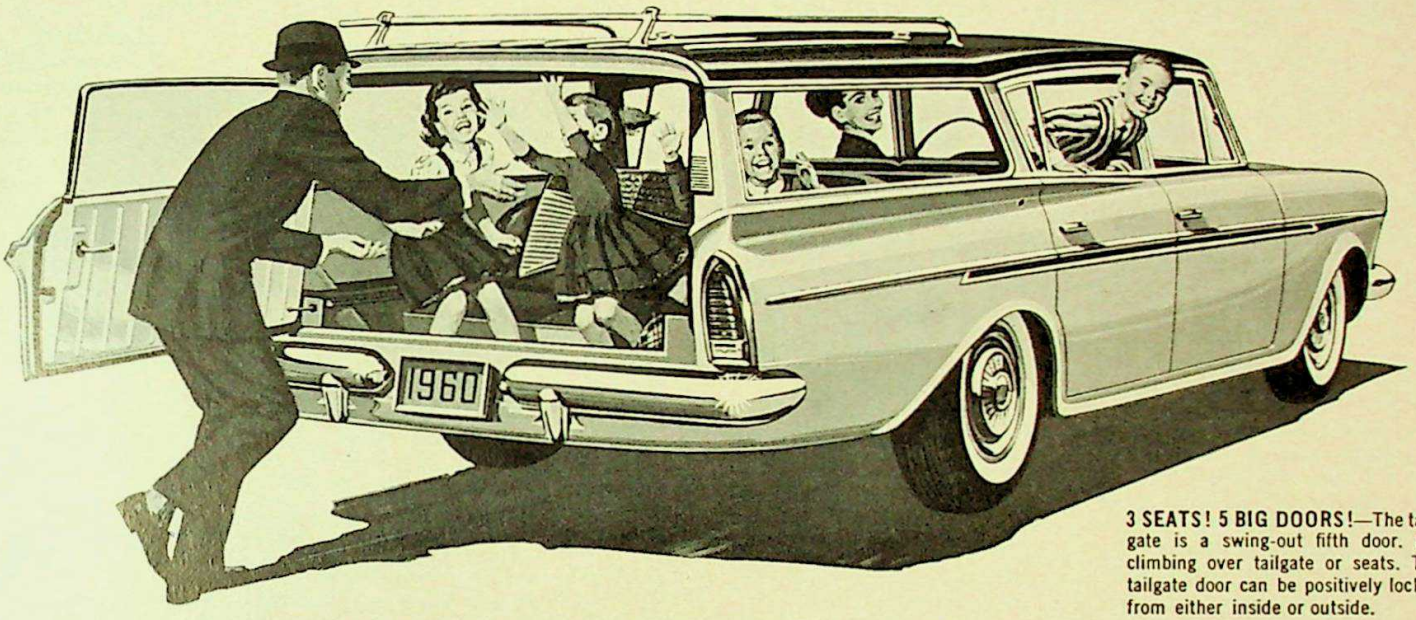

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See The New Standard Of Basic Excellence

AT YOUR NEARBY RAMBLER DEALER

The De Soto 4-door Fireflite sedan, shown here, has a wheelbase of 122 inches and an over-all length of 215.4 inches. It comes in three body styles.

Shown here is the 1960 De Soto 4-door Adventurer which is offered in three body styles—a four-door sedan, a four-door hardtop, and a two-door hardtop.

Six Models In Two De Soto Series

Bold styling ranging from a striking grille to sculptured rear fenders, engine improvements, and stronger body structure are features of the 1960 De Soto cars which made their public appearance in mid-October with three models in each of the Adventurer and Fireflite series.

De Soto has streamlined its 1960 selection to these six models, including a four-door sedan, a four-door hardtop and a two-door hardtop in each series. As in the past, Sportsman is De Soto's designation for its hardtops.

Adopts Unibody Construction

In body design, sculptured lines sweep back from the dramatic front end and flare outward in a distinctive fin treatment. Measured by a single line of stainless steel molding, the long clean side panels merge with the smooth slope of the deck lid at the rear of the car, and the body is topped off by a slim roof line that marks the spacious passenger compartment.

Complementing the styling is Unibody, single unit construction, which provides the strongest bodies in De Soto history, especially tuned to road conditions for quiet riding. Newly designed structural characteristics are such that engine vibration and road vibration cancel each other out.

With the frame integrated into the body, De Soto engineers have been able to lower the floor plan to allow more leg room and higher, more comfortable seats. Front door pillars are straightened to provide easier access through larger door openings both in the front and rear.

The engine and front suspension are supported by a fore-structure solidly united with the body. Bolted-on front end sheet metal minimizes collision cost in key areas.

New Rustproofing Process

Dipped and rinsed in a seven-stage process and sprayed six times, the body is thoroughly rustproofed before the first of four coats of paint is applied. De Soto offers 16 Lustre-bond enamel colors for 1960, twelve of which are new, with eight metallic shades making their debut. A total of 120 two-tone combinations are available.

Abetting the theme of strength, ram induction, an optional engine package, heads a selection of four engines for 1960, and supplies quick power to the Adventurer series. The ram induction system rams fuel and air into the engine when the throttle is opened. It takes no power from the engine to operate, using mass inertia and sonic resonance effects of the fuel-air mixture in the long ram manifold passages to force the fuel into the engine.

Four Available Engines

A compression wave is built up in the manifold and the lengths of the pipes have been selected so that the pressure peak is at the valve when it is open, forcing the fuel-air mixture into the engine.

Four engines are available in 1960, headlined by the new ram induction engine. The ram charge engine is combined with two four-barrel carburetors and is available as a high performance option on the Adventurer.

The De Soto Fireflite carries a standard 361 cubic-inch Turboflash V-8 engine. Standard power plant on the Adventurer is a 383 cubic-inch V-8. Both Turboflash and Adventurer engines have two-barrel carburetion, but a four-barrel, 383 cubic-inch option, the Adventurer Mark I engine, is available in both series.

The horsepower line-up for 1960 is Turboflash, 295; Adventurer, 305; Adventurer Mark I, 325; and Ram Charge, 330.

Auto-Pilot Safety Feature

A bigger windshield means a ten per cent increase in the forward viewing area of the sedans, while the Adventurers have an increased rear window size to provide over 4,600 square inches of safety glass all around for greater visibility.

Auto-pilot is a safety feature unit which, when set at any given speed, will increase accelerator pressure against the driver's foot as the car reaches the speed setting. The back pressure alerts the driver to his rate of speed. It also can be used to maintain a preset speed until the driver touches the brake pedal.

Other safety refinements include full-time constant control power steering, which has been made even more precise for greater driver control. New supports within the brake drums assure accurate alignment for each brake shoe, eliminate binding and excessive friction. The parking brake is set by foot so that more force can be applied to the brake.

In other innovations, the 1960 interiors designed around the driver, offer two unusual items—the automatic swivel seat, and an RCA Victor record player that plays standard 45-rpm records.

Wheelbase Of 122 Inches

Wheelbase of both the Fireflite and Adventurer is 122 inches, with the former having an overall length of 215.4 inches and the latter 217 inches. Overall width is 79.4 inches for both series, and overall height is 55 inches for both.

In the Fireflite, manual transmission is standard with Powerflite and Torqueflite optional. In the Adventurer, Torqueflite is standard with the other two not available.

Delman Company In Plastics Merger

The Delman Company of Detroit, manufacturers of automotive windshield washing equipment, and Vantines, Inc., of New York, plastics manufacturers, have organized the Delman-Vantines Blow Molding Corporation to produce molded plastic parts for the automotive and allied industries.

Delman, a major supplier of automotive specialties since 1947, has offices in Grosse Pointe Farms at 128 Kercheval avenue, and its main plant is in Cookeville, Tenn. The present Vantines, Inc., organized in 1947, produces a broad line of molded plastics, using automatic machinery imported from Germany.

Vantines, Inc., with a business background dating back to 1866, has pioneered in the adaptation of blow molding techniques to a steadily-lengthening list of products, many of which are supplanting metal die-castings and stampings, as well as injection-molded plastics.

Chuck Bachrach, president of the Delman Company, is president of the new organization. He also is director of the firm along with Robert R. Mandy, Detroit, secretary.

Pointing to the tremendous potential market in the motor vehicle and allied fields for parts produced by blow molding, with resultant substantially reduced costs, Bachrach said: "In blow molding, die costs may run as much as 80 per cent lower than in injection molding, because air takes the place of the usually expensive male die. In blow molding, air pressure also is reduced to only 80 pounds eliminating the high pressure commonly used in injection molding."

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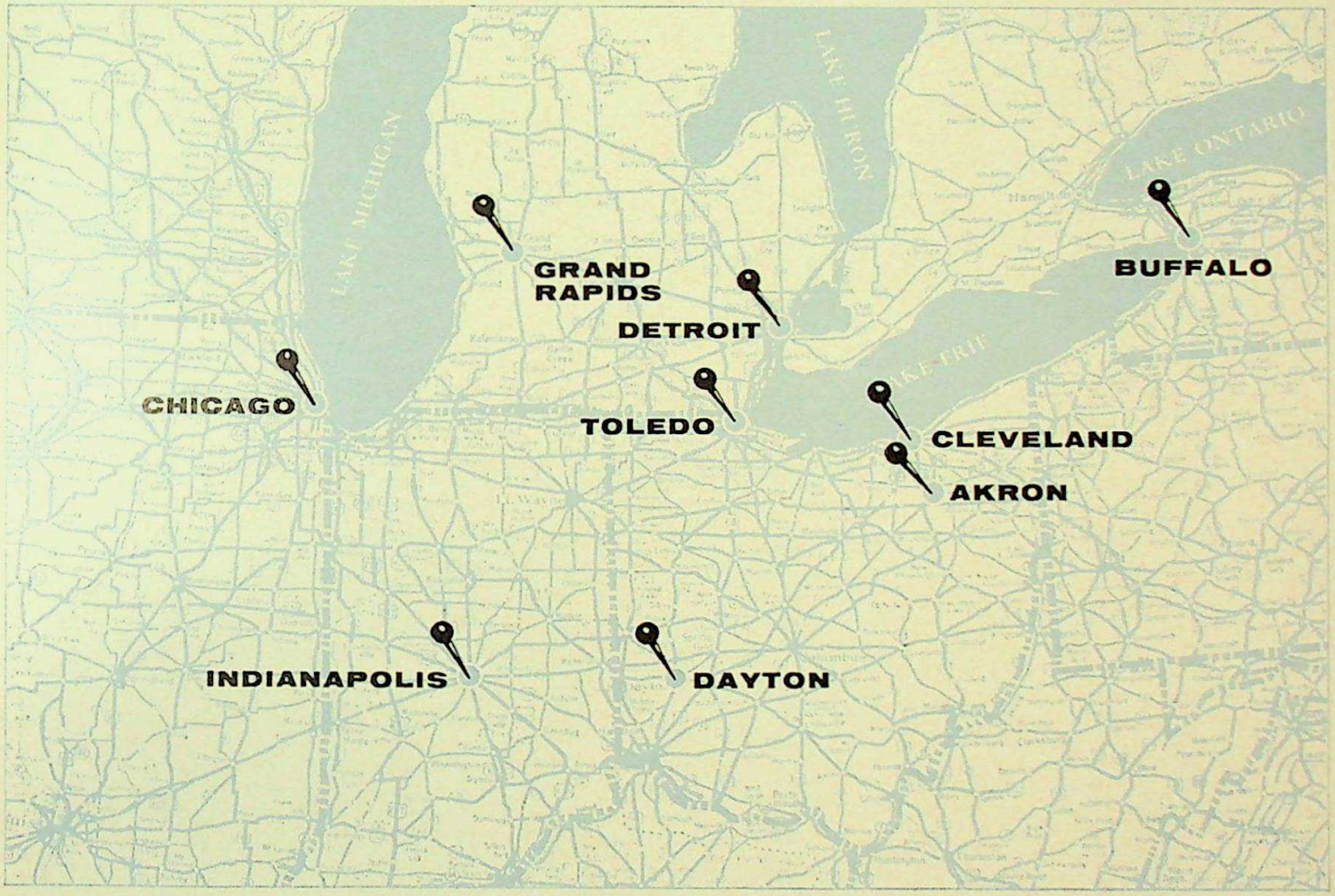

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★ ★ ★

Attractive, maneuverable, and easy on the purse. That's the 1960 two-door hardtop Lark offered by Studebaker-Packard. This model is available in the top Regal line with V-8 or 6-cylinder engines. In all, the Lark is being offered in 16 models, including two convertibles, four 4-door station wagons, two 2-door station wagons, four 4-door sedans, two 2-door sedans, and two 2-door hardtops.

A photo of the Lark convertible model appeared in the October edition of this publication.

★ ★ ★

16 Models In Lark's Complete Line

Two new convertibles, plus four new models of four-door station wagons, are highlights of the 1960 Larks by Studebaker which went on display in dealer showrooms in mid-October. Addition of the convertibles and four-door wagons to 1960 Lark offerings rounds out the first complete line of body styles in the convenience-size car field. Studebaker has not marketed a convertible since 1952.

In announcing the new cars, Harold E. Churchill, president of Studebaker-Packard Corporation, said: "Public enthusiasm for the Lark in its first year on the market prompted us to add new models which will give the buying public a choice of body styles in the convenience-size field previously found only in the oversized car selections."

Retain Their Styling

The new four-door Lark station wagons are available in L-head, six-cylinder and V-8 engine models in both Regal and Deluxe lines. The Lark convertibles become part of the Regal lines with either six or V-8 power plants.

In the Regal V-8 line, there are a convertible, 4-door station wagon, 4-door sedan, and 2-door hardtop. The Deluxe V-8 line offers a 4-door station wagon, 2-door station wagon, 4-door sedan and 2-door sedan. The Regal Six has a convertible, 4-door station wagon, 4-door sedan, and 2-door hardtop. The Deluxe Six line features a 4-door station wagon, 2-door station wagon, 4-door sedan and 2-door sedan.

Cites Engineering Changes

Recalling his statement of a year ago that the Lark "has been designed deliberately to stay in style indefinitely", Churchill declared that buyers resent their new car being made obsolete by each ensuing year's model. "For 1960," he said, "the Lark's distinctive features have been retained as promised, along with its minimum exterior dimensions and full-sized interior roominess."

Engineering changes for the new Lark are primarily under the hood. The Lark Six features a new carburetor to give its proven power plant more efficient operation and improved performance. Supplementing the carburetor, modifications of the cylinder head and combustion design, torque converter, starter and air cleaner, along with new butyl engine mounts, all add up to livelier response, smoother operation and easier starting.

The Lark V-8 also features modifications of the carburetor and fuel pump and a new distributor, also contributing to greater operational efficiency.

Specifications for Lark engines remain unchanged. The 169.6 cubic-inch, L-head, six-cylinder engine develops 90 horsepower at 4000 r. p. m. with a torque rating of 145 at 2000 r. p. m. It has a compression ratio of 8.3 to 1. The V-8, with standard two-barrel carburetion, develops 180 horsepower at 4500 r. p. m. with a torque rating of 260 at 2800 r. p. m. Its compression ratio is 8.8 to 1. Both engines operate on regular grade gasoline.

Higher Power Optional

For those desiring more power, dual exhausts and four-barrel carburetors are available optionally on V-8 models. With this equipment, the 259.2 cubic-inch power plant develops 195 horsepower at 4500 r. p. m. with a torque rating of 265 at 3000 r. p. m.

All Lark models, including the new convertibles, retain the shorter overall length (184.5-inch for wagons, 175-inch for all others) without useless overhang while featuring roomy interiors. Additional rear legroom in the sedans and station wagons has been achieved through new front seat design.

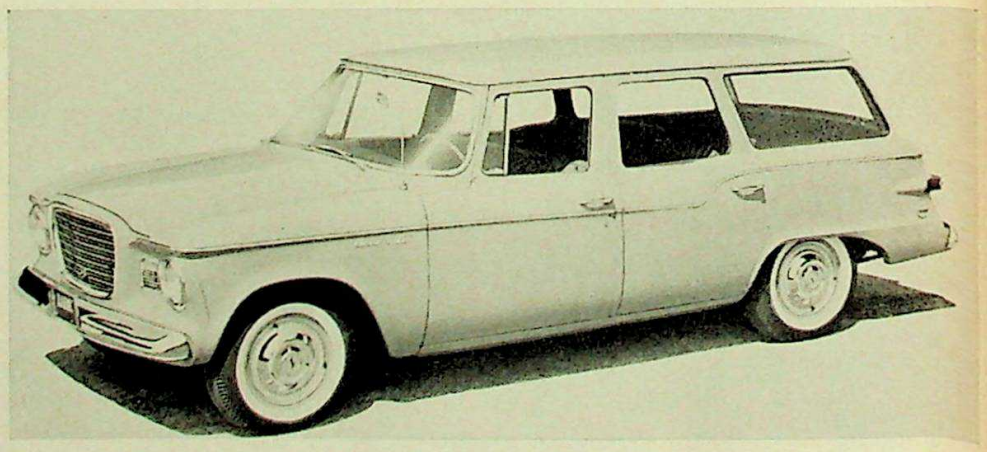
Rear seat legroom has been increased from 38 to 39 inches in sedans and hardtops. On all models having split front seats, knee room for rear seat passengers has been increased two inches. Legroom in the front of all models is 44 inches.

Variety Of Options

Optional equipment available on all Larks includes overdrive or Flightomatic transmission, Twin-Traction differential, hill holder, reclining front seats, and air conditioning.

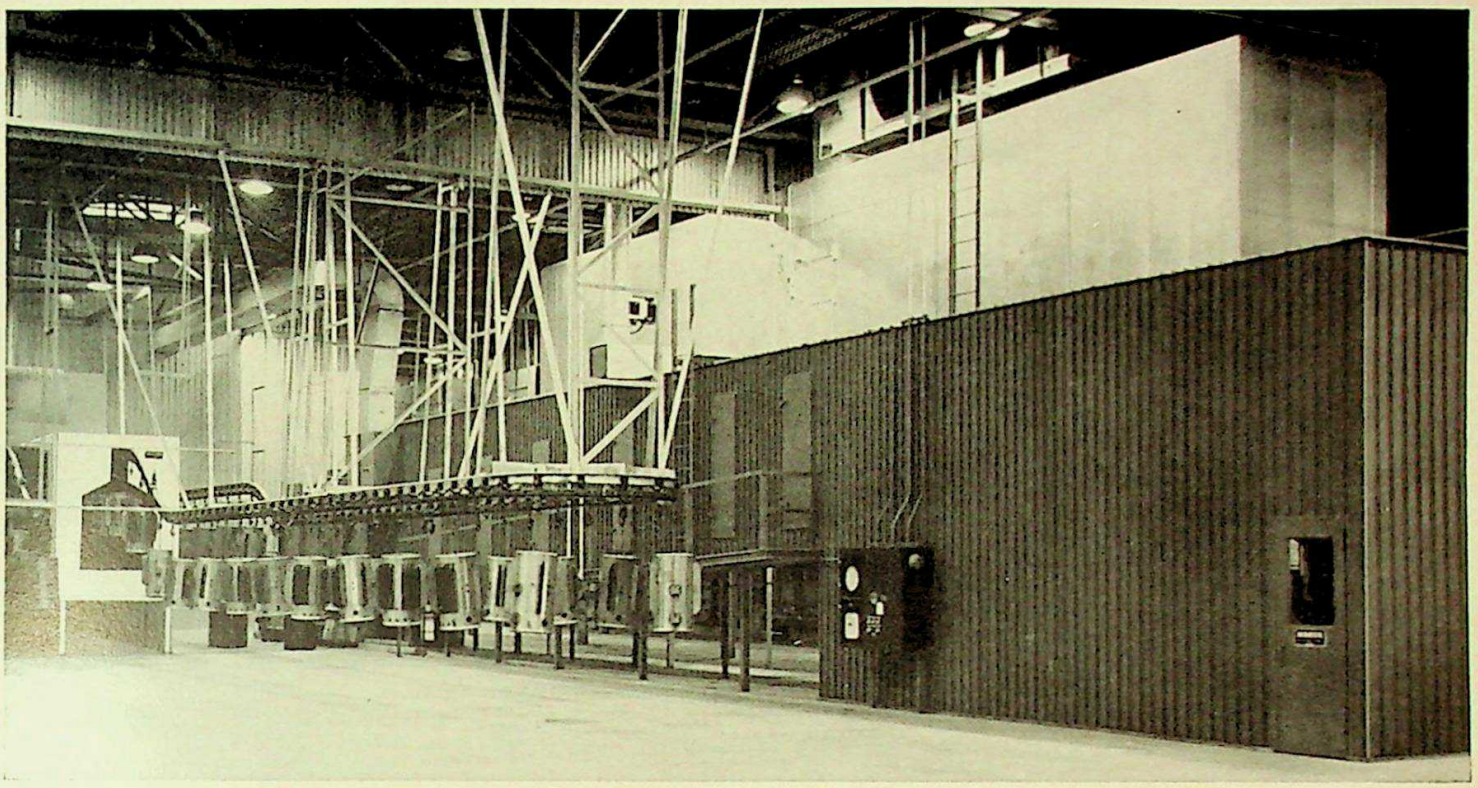
Power steering is optional on all Lark V-8s. Power top is standard equipment on the convertibles. Roof luggage carriers and rear-facing third seat are available for all station wagons. Individually adjusted headrests are a new

(*Continued on Page 72*)



A new Studebaker model for 1960 is this Lark four-door station wagon available with either a six-cylinder or V-8 engine. The new Lark station wagons feature tailgates with greater glass area, and safety locks which securely hold the lifted tailgate doors and upper sections in place.

FINISHING SYSTEMS...



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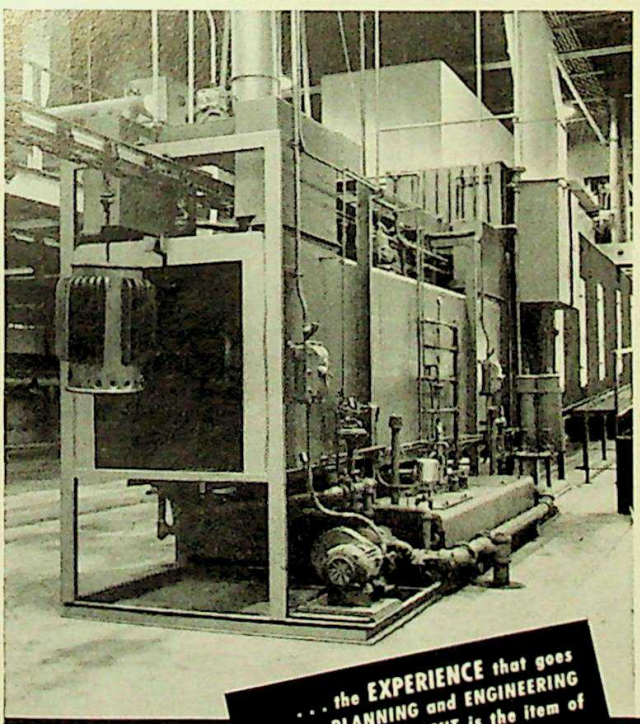

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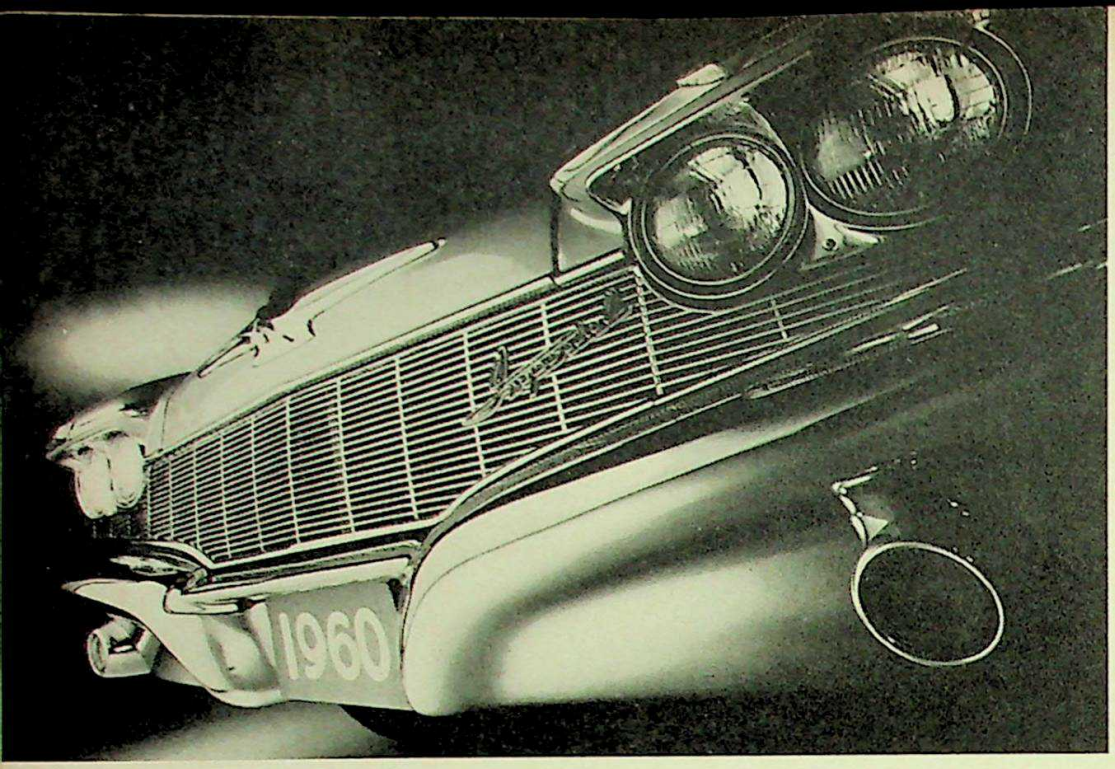


★ ★ ★

A V-shaped sculptured bumper highlights the redesigned 1960 Imperial grille. Parallel chrome lines form a simple background for a signature Imperial nameplate. Parking lights are located at the extreme ends of the bumper. A stylized Imperial eagle in chrome hovers over the grille from its hood perch.

★ ★ ★

1960 Imperial Styling Greatly Changed

First of the 1960 Chrysler Corporation passenger cars to make their public bow, the new line of Imperial cars was displayed in dealers' showrooms on October 2. C. E. Briggs, corporate vice-president and general manager of the Chrysler and Imperial Division, said the new models represented the most extensive styling change in the Imperial since it became a completely separate line in the 1957 model year.

"We have modified everything—doors, roof, quarter panels, hood, deck lid, fenders, front, rear and interior—yet we were careful to retain the Imperial look," Briggs said.

Stresses Passenger Comfort

Briggs said that special attention had been given to the interiors of the new models, particularly to design features which contribute to passenger comfort. In this classification he cited:

New high-tower driver seat for greater driver back and shoulder comfort.

Foam rubber padding up to six-inch thickness in both front and rear seat backs.

Adjustable spot air conditioning unit beneath steering column opposite the driver.

New non-glare instrument panel with EL light for less driver eye strain.

Improved Auto Pilot with additional automatic features.

New automatic swivel seat.

New six-way power seat featuring easier multi-directional control.

The 1960 Imperial offers a wide variety of model choices. A four-door sedan and a four-door Southampton hardtop are available in the Imperial Custom, Crown and LeBaron series. A two-door Southampton hardtop is available in either Custom or Crown series. In addition, the Imperial Crown series offers a convertible coupe.

The Imperial retains its basic overall length of 226.3 inches, and wheelbase of 129 inches. Its 413 cubic-inch V-8 engine, with compression ratio of 10.1 to 1, rated at 350 horsepower, also is retained.

The 1960 Imperial's new silhouette features a wedge-shaped profile, and an elongated hood line reminiscent of classic Imperial automobiles of the Thirties. Tailfins are adorned with the familiar gunsight tail light. Between the chrome encircled lights is another familiar Imperial hallmark—Flight Sweep decklid.

Chrome Eagle On Hood

Sculptured paneling sweeps almost the full car length, complemented by forward sweeping canopy roof molding, extending from backlight to windshield. Standard treatment for the lower side roof areas is body color in the Imperial Custom and Imperial Crown, with satin-finished stainless steel in the Imperial LeBaron.

The grille area is dominated by a "V" sculptured massive bumper containing recessed parking lights at opposite ends of the bumper. A stylized Imperial eagle in chrome hovers over the grille from its hood perch.

A key feature of the Imperial LeBaron is a small rear window creating a distinctive town car look in both sedan and hardtop models.

Finger-tip actuated power vent windows are offered on the 1960 Imperial for the first time. They are standard equipment on the Imperial LeBaron.

The new elliptical steering wheel is introduced on the 1960 Imperial as a standard item. The wheel is in two-toned plastic, with grooved handgrips.

Improved automatic swivel seats will benefit both driver and front seat passengers. An optional item, the new seat automatically comes out to meet the passenger as the door is opened, and automatically returns to forward position as the door is closed.

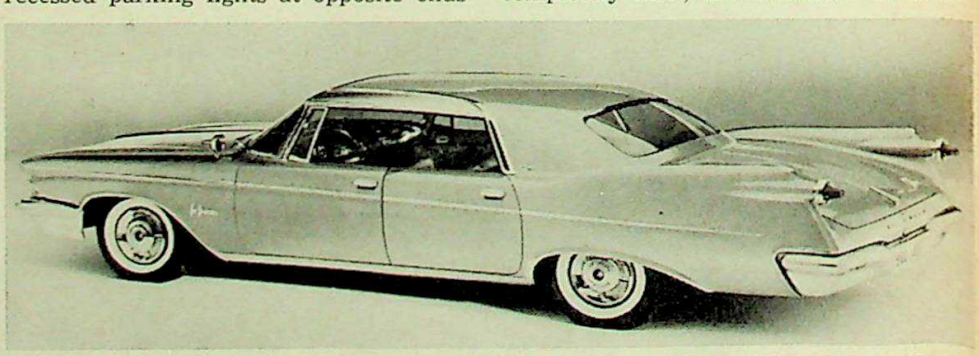
Double-Layer Plating

Every exterior plated part of the 1960 Imperial is far more corrosion resistant than ever before through a newly developed double-layer plating process. Corrosion is stopped at the boundary between two layers of durable nickel.

Seventeen exterior colors, 13 of them completely new, are available in 1960.

AGENCY NAME UNIFORM

The name of Donner and Peck advertising agency in New York has been changed to W. B. Doner and Company, the same designation which is now uniform in all six offices of the agency, including the one in Detroit



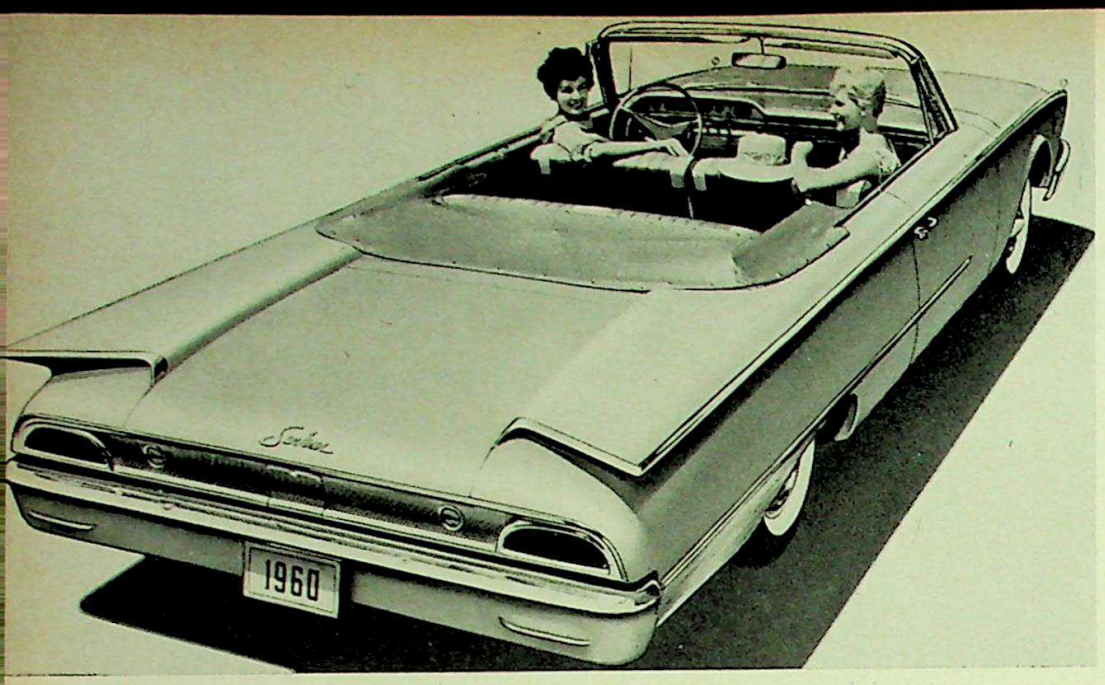
A special slender rear window treatment gives the 1960 Imperial Le Baron four-door Southampton a distinctive town car look and protects the privacy of rear seat passengers. (A photo of the Imperial Custom four-door Southampton was carried in October.)

LOOK WHAT'S NEW FOR YOU IN 1960

LOVE THAT LARK *BY STUDEBAKER*

FIRST, for the heart-throb drive of the year a pert, perky new convertible—only one of its kind SECOND, the new easy-entry, 4-door work'n'play wagon; shorter outside, full cargo room inside NEXT, six stunning body styles—a full line to meet your 1960 needs ALSO, glowing new fashion-fresh colors; superb new quality tailored interiors; new appointments And all in the car that's been PROVEN BY 750 MILLION MILES OF OWNER USE. See, drive The Lark today. Car of the year!

The LARK for '60—world's first and only full line of new dimension cars—available in 2 and 4-door sedans; 2 and 4-door station wagons; sporty hardtop and exclusive convertible. Your choice of super economical Six or powerful V-8, Mobilgas Economy Run Leader.



★ ★ ★

The 1960 Ford Sunliner is one of 15 models in the new Ford line. Featuring a strikingly modern rear deck and flat-wing motif, the new Fords are five inches longer, five inches wider and have more interior leg, hip, shoulder and head room than before.

All 1960 Fords have the slim-line, forward sloping front roof pillar that eliminates the "dog leg" for easier entry.

The Ford engine line-up for 1960 includes the economical 145-horsepower six; and three V-8 engines ranging in horsepower from 185 to 300.

★ ★ ★

1960 Fords Are "Comfort-Engineered"

"Comfort-engineered" are the words used by J. O. Wright, Ford Motor Company vice-president and general manager of the Ford Division, to describe the 1960 Ford line. "There is substantially more hip room, shoulder room, leg room and head room in the 1960 Ford than there was in the 1959 model," he explains. "With the new body design, the new frame, redesigned suspension and improved power train, it rides better, handles better and preforms better than any Ford in history."

The 1960 Ford represents a styling theme originally created for later use but brought forward because of the spontaneous enthusiasm of company management when they first saw the car in advance studios," Wright disclosed.

Eliminates Dogleg

Passenger comfort and convenience have been stressed in the design of the new Ford cars. Swept-back windshield pillars have eliminated the troublesome "dog-leg" found in cars with the full-wrap windshield. Yet, the 1960 Ford has 17 per cent more windshield area than the 1959 car, provides better visibility over the hood, and has a windshield wiper pattern one-third greater than in 1959.

"Posture-perfect" seats permit the driver and pasengers to sit in comfort on foam padding and at what Ford research has proven to be the most comfortable seating angle.

Adding to the convenience of the new Ford line are such features as a trunk opening that is only 27 inches from the ground, a foot-operated parking brake with the release knob located on the instrument panel, and two-stage door checks.

New Flat-Wing Motif

What Ford describes as the new flat-wing motif has been substituted for tail fins at the rear. These wings spread outward from the edges of the deck lid. The protruding outer edges of these wings are continued along the entire length of the body just below the window line, gradually tapering inward as the edge reaches the front.

The conventional front fenders have been virtually eliminated by the wider front hood which extends almost all the way across the front to the sides. The hood slopes downward from the windshield for improved visibility.

15 Models Offered

Fifteen models are offered in a total of six different roof lines. At the low end of the line is the Fairlane series, which includes a two and four-door sedan and a business Tudor. In the Fairlane 500 series, there are two models—a two and a four-door sedan. The Galaxie series includes a two and a four-door sedan, plus a four-door hardtop called the Town Victoria.

The Starliner, a new two-door hardtop entry in the Ford line, is one of two special models. It features a unique "fast back" roof that sweeps back to blend with the rear deck. The other special model is the Sunliner, Ford's soft-top convertible.

Better stability and improved handling have been effected partly through a wider tread, but mostly through the widening of the rear spring base. Two full inches have been added to the front tread width and nearly four inches to the rear tread.

In the station wagon field, Ford is offering five different models with a longer load space, greater passenger comfort and more versatility. Ranging from the two-door Ranch Wagon to the elegant four-door, nine-passenger Country Squire with simulated mahogany paneling, the line has a wagon model to meet any requirements.

The load space in the 1960 Ford station wagon is nearly a foot longer than last year, and the tail gate opens flush with the floor. With the front-facing third seat in position, there is still stowage room ahead of the closed tail gate.

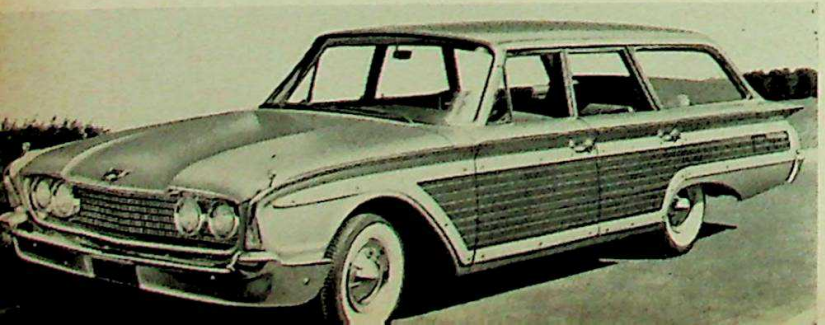
Two Automatic Transmissions

All standard Ford engines—both "six" and V-8—are designed to operate on regular grade gasoline. Ford offers four modern, short-stroke engines for 1960, all of which combine efficiency, durability and economy with the added customer savings resulting from quick and easy service. The full-flow oil filter permits Ford to recommend an oil change only every 4,000 miles. A new cross-flow radiator, which directs the coolant horizontally, provides improved cooling.

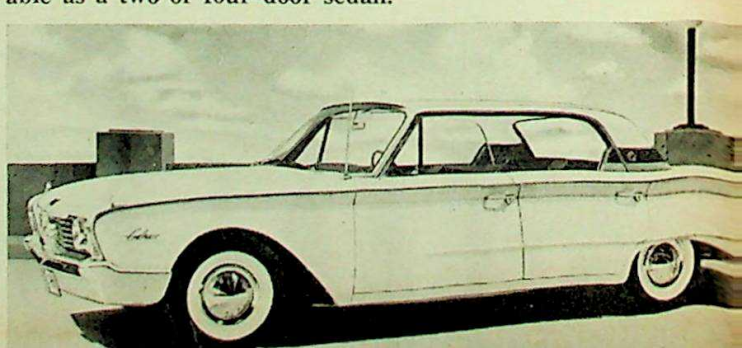
The Ford engine line-up for 1960 includes the economical 145-horsepower Mileage-Maker Six, of 223 cubic-inch

(*Continued on Page* 84)

This nine-passenger Country Squire is one of five all-new station wagons in the 1960 Ford car line. Ford station wagons for 1960 are 5½ inches longer, one inch lower, and have a load space nearly a foot longer than in 1959. They also feature a front-facing third seat.



Shown here is the Ford Galaxie Town Victoria which shares the new styling characteristics of other Ford models but bears an unmistakable resemblance to the Thunderbird profile. It is one inch lower than in 1959, and also is available as a two or four-door sedan.



The Happy Revolution

The great 20th century revolution, in the inspiring words of a recent best seller*, began not in Russia but in America—and more precisely in Detroit.

It began with the business of putting America on wheels and has extended far beyond the concept of transportation alone. It has touched every facet of our economy... has added the element of greater stability to our way of life.

Manufacturers National Bank, as one of the beneficiaries of this 20th century miracle, is proud to salute the great automotive industry.

MANUFACTURERS NATIONAL BANK
OF DETROIT

DETROIT • DEARBORN • HIGHLAND PARK • BLOOMFIELD
FARMINGTON TOWNSHIP • GROSSE POINTE WOODS • MELVINDALE • NORTHVILLE
PLEASANT RIDGE • REDFORD • SOUTHFIELD • WARREN

MNB

Member Federal Deposit Insurance Corporation

**Image of America*, by R. L. Bruckberger—Published by The Viking Press, Inc.

The Plymouth 4-door Sport Suburban comes in both six and nine-passenger models, and is available with either a six or eight-cylinder engine. It is one of 24 models in the complete Plymouth line for 1960.

Shown here is the 1960 Plymouth Fury 2-door hardtop, which is powered by an eight-cylinder engine. Also available in the Fury series are a four-door sedan, four-door hardtop, and a convertible.

Plymouth Features Two New Engines

Featuring unified body and frame structure, and completely new styling, the 1960 Plymouths are described by Harry E. Chesebrough, vice-president of Chrysler Corporation and general manager of the Plymouth-De Soto-Valiant division, as the "strongest, quietest, fastest accelerating and most economical operating car in Plymouth's history."

Two completely new engines are added in the 1960 line of six engines, each of uniquely different design and each developed to fulfill a specific requirement. The 30-D Economy Six with 145 horsepower has been introduced for drivers who desire maximum fuel savings.

Features Ram Induction

The SonoRamic Commando V-8 with 330 horsepower, which brings ram induction to passenger cars for the first time, is primarily a "performance" engine with outstanding acceleration characteristics.

The high performance engine obtains the results of free supercharging through the use of long, curving intake manifold tubes to force air and fuel into the cylinders at exceptionally high speed. Like a supercharger, ram induction rams air and fuel into the engine when the throttle is open, but unlike a supercharger, it does not take any power from the engine for its operation, and it has no moving parts to get out of adjustment.

For 1960, the Plymouth body and frame are integrated into a single unified structure, locked together by more than 5,000 welds. The design affords advantages in terms of both strength and space efficiency. The cars are easier to get into and out of, and seat heights have been raised for more comfort. The absence of connecting bolts and braces not only lends strength but eliminates rattles. Bodies are 100 per cent stronger in resisting twist and 40 per cent stronger in resisting bending.

During assembly, the Plymouth body is subjected to the most intensive rust-proofing process ever known to the industry. Although heavier gauge metal provides natural resistance to corrosion, the body protective coatings are applied in seven separate dipping operations, supplemented by six spray applications.

For styling effect the 1960 Plymouth depends upon its basic lines rather than ornamentation. Chrome accents are used to highlight significant styling features, rather than to break up masses of sheet metal. Sportone treatment is confined to the lower recessed portion of the sculptured front fenders. Windshields on all models curve into the roof as well as wrap around the sides. A new Ski-Hi rear window on hardtop models carries the rear glass an additional nine inches higher on the 4-door hardtop, 11 inches more on the 2-door hardtop.

Six Power Plants

The 1960 power plant line-up includes a total of six engines. In addition to the new 30-D Economy Six and the SonoRamic Commando, there is a SonoRamic 310-horsepower engine with 10 to 1 compression ratio; the Golden Commando V-8, 305 horsepower engine, with 10 to 1 compression ratio; the Fury V-800 with Super Pak, a 260-horsepower engine with 9 to 1 compression ratio; and the Fury V-800, with 230 horsepower and 9 to 1 compression ratio.

The 30-D Economy Six is standard on the Savoy, Belvedere, Deluxe Suburban and Custom Suburban. The Fury V-800 is standard on the Fury and Sport Suburban, and optional on the Savoy and Belvedere. The four other top engines are optional on all V-8 models.

Plymouth offers four transmissions for 1960, two manual transmissions and a Power-Flite and a Torque-Flite push button transmission.

Twenty-four models are offered in 1960 in Plymouth's three lines of cars (Savoy, Belvedere and Fury) and three lines of station wagons (Deluxe, Custom and Sport Suburban). In the Savoy line, there are a two-door and four-door sedan, in both sixes and V-8. In the Belvedere line, there are the same models but also a two-door hardtop, in either Six or V-8. In the Fury line, there are a four-door sedan in both Six and V-8, and a two-door hardtop, four-door hardtop and convertible, all in V-8's.

The Deluxe Surburban comes in a two-door, either six or eight; and a four-door, six passenger, either six or eight. The Custom Suburban offers a four-door, 6-passenger in either six or eight, and a four-door, 9-passenger V-8. The Sport Suburban features a four-door, 6-passenger and a four-door, 9 passenger, both eights.

Wheelbase of all lines is unchanged from 1959 at 118 inches, while all Suburbans have a 122-inch wheelbase. Over-all length of the new models is 0.9 to 1.2 inches longer than last year, while over-all width also is fractionally greater, and over-all height reduced as much as two inches in the 4-door sedan.

New Safety Features

One of the outstanding safety devices to be developed in years is the new Safe-T-Matic door lock system, which automatically locks all doors when the engine is started. Another safety feature is the four-light emergency warning flasher system. Whenever a car must be stopped on the highway, a flick of an instrument panel switch starts all front and rear turn signal indicators flashing continuously and simultaneously as a warning to other drivers.

Swivel seats are automatic for 1960. Optional on Fury and Sport Suburban models, the new seat swings out to meet you when the door is opened, and it swings back out of the way when the door is closed.

Seats are higher and more comfortable. For Fury and Sport Suburban models, the driver's "command" seat is standard equipment. It has a higher back for greater driver comfort and individual bolster treatment. For the first time, front seats may be custom-positioned. They may be raised, lowered, moved forward or back, or tilted and then locked into the most comfortable position, by tightening four adjusting bolts. Also for the first time, Plymouth offers as optional equipment a six-way power seat.

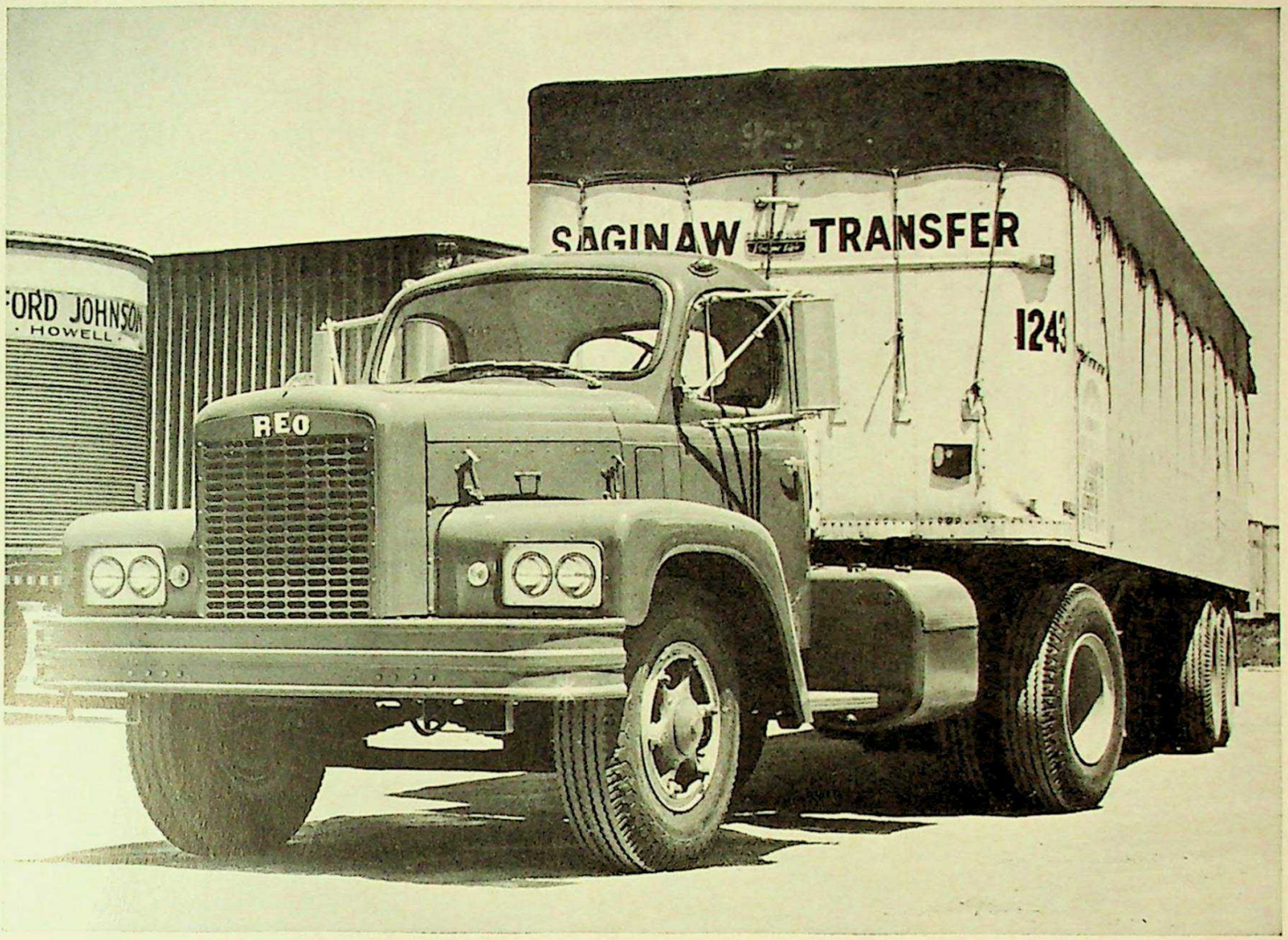
Reeme Named Stevens President

W. Joseph Cluff has retired as president of Frederic B. Stevens, Inc., Detroit, manufacturer of foundry facings and supplies, and a subsidiary of Udylite Corporation, after serving as president for the past 25 years.

Cluff has been succeeded as president by Clyde H. Reeme, Udylite president, but will continue as consultant to Stevens and as a director of Udylite.

PUBLICIZES UDYLITE CORP.

The Udylite Corporation, Detroit, has appointed Palmer, Codella & Associates, New York, as its public relations counsel, as well as for its subsidiaries, Frederic B. Stevens, Inc., Detroit, and L. H. Butcher Co., Los Angeles. The New York firm has opened a Detroit office in the Book Building.

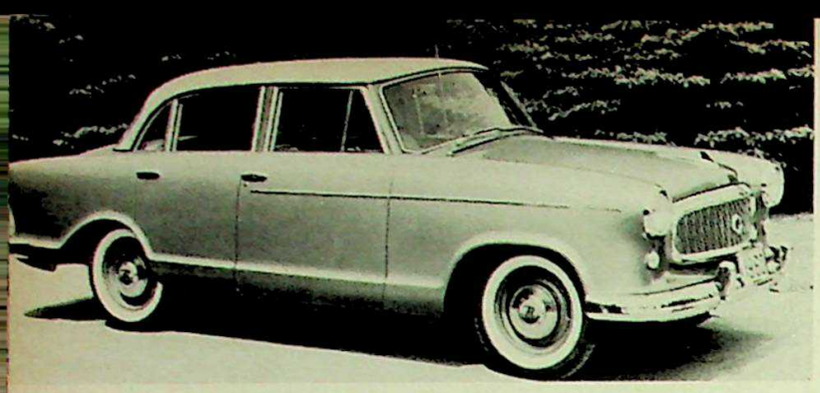


REO

Unique to Reo and its complete line of Gold Comet engines, V-8's and 6's—is its advanced "wet-sleeve" replaceable cylinder construction. This design, together with the special alloy materials used and close tolerances to which pistons and cylinders are uniformly controlled, assures unsurpassed cylinder wall life. **Unlike conventional engines, a Reo engine never requires re-boring.** When it reaches the point of overhaul, it can be restored to its original standards of performance by any mechanic with the use of low cost factory matched cylinder-piston kits. Advanced "wet-sleeve" construction is another way in which important hidden values are built into every Reo engine . . . gasoline, LP-Gas and Diesel.

REO DIVISION, The White Motor Company, Lansing, Michigan

GOLD STANDARD OF VALUES



The 100-inch wheelbase Rambler American line has been expended in 1960 to include the four-door sedan model shown here. It has a six-cylinder engine with 90 horsepower rating.

Like all Rambler station wagons, the American features a roof-top luggage rack which adds a distinctive styling note. It is powered with the regular 6-cylinder, 90 h. p. engine.

Rambler American Adds 4-Door Sedan

A new four-door sedan model was added to the 1960 Rambler American line when the new cars were displayed in American Motors' Rambler dealerships across the country on Oct. 14 The American line also includes two-door sedans and station wagons.

"American models accounted for almost 25 per cent of total Rambler production in the 1959 model year," said Roy Abernethy, AMC vice-president of automotive distribution and marketing. "The new addition to the 100-inch wheelbase American series was made because of public demand for a four-door model," he explained.

Enlarged Glass Area

In line with AMC's policy of retaining styling stability, the 1960 American features clean, functional styling and changes which provide for increased convenience and comfort. For example, the door opening angle has been changed from 55 to 75 degrees to allow easier entry. The rear doors on the new four-door sedan also open to 75 degrees.

Window area has been increased by elimination of the "lip" on the upper edge of the doors and rear quarter panel. This provides smoother body line and enlarges the glass area of sedans by 5.1 per cent and of station wagons by 2.5 per cent.

The four-door sedan features rear quarter side windows to eliminate "blind spots" for rear seat passengers.

Longer coil springs add comfort to the chair-high seats.

All American models are less than 15 feet long (178.3 inches) but provide generous interior room for five adult passengers. Hip room dimensions are 58 inches in the front seat and 45¼ inches in the rear. Legroom totals in the front are 44 inches and in the rear 37½ inches. The car's compact length and wheelbase results in a turning diameter of only 36 feet.

The economy six-cylinder engine develops 90 horsepower, has a compression ratio of 8 to 1 and piston displacement of 195.6 cubic inches. Regular grade gasoline is recommended.

The cargo compartment of the station wagon has a carrying capacity of 52 cubic feet with the rear seat down. The Super station wagon has a chrome roof-top travel rack which provides additional luggage space.

An important mechanical change for 1960 is the use of bonded brake linings instead of riveted linings, offering longer brake life and lessening the danger of scored brake drums. Self-adjusting brakes are offered as a low-cost option.

New Options Available

Power Steering is offered for the first time on the 1960 models. Air conditioning also is available as a dealer installed option on all 1960 models. Another option on the four-door and two-door sedans is the continental tire mount.

Twelve solid colors and 22 two-tone combinations are available for the 1960 American line.

Ad Agency Erects New Office Building

Scheduled for completion next March, MacManus, John & Adams, Inc., currently has under construction a new two-story office building at West Long Lake road and Woodward, it is announced by E. A. Jones, president of the national advertising agency.

The building, which is directly across West Long Lake Road from the main offices of the agency, has been designed to provide for more than 100 employes presently occupying the nearby Gleaner Building.

"The agency's original building, completed in 1952, was designed to provide for a 50 per cent expansion of staff, but became over-crowded a short time after the agency occupied it in 1952," Jones said.

Originally, the agency headquarters contained 33,000 square feet of space. An additional 6,000 square feet was built three years ago, and the new building will provide another 30,000, for a total of approximately 70,000 square feet.

According to present plans, the new building will be occupied by the agency's media, research, marketing, merchandising, accounting and roadside signs departments, Jones said.

The Charlson Company, Wyandotte, has the general contract.

Architect's rendering of the new two-story office building now under construction at West Long Lake road and Woodward in Bloomfield Hills for MacManus, John & Adams, Inc. It will be completed next March.

Elected Prophet Co. Treasurer

Election of Ray Bodinus, assistant treasurer, to the post of treasurer of The Prophet Co., Detroit-headquartered coast-to-coast food management and consultant firm, has been announced by Henry A. Montague, president. Bodinus fills the vacancy caused by the recent retirement of Harry G. Benford.

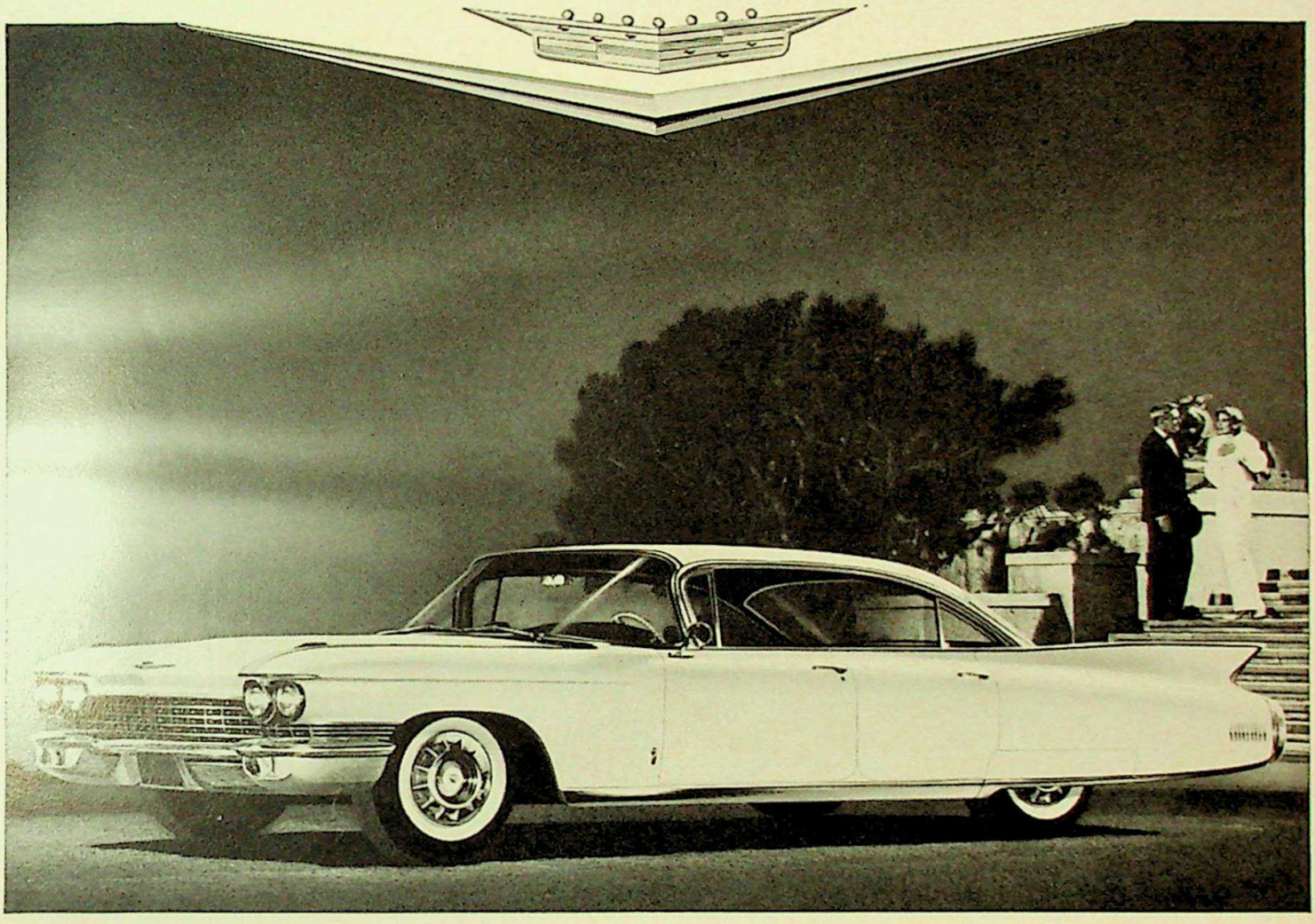
RAY BODINUS

Bodinus joined The Prophet Co. in October, 1945, and was placed in charge of the accounts payable department. Later, he was advanced to office manager, and then elected assistant treasurer. Prior to joining The Prophet Co., he was employed by the old First National Bank and James Vernor Co., both of Detroit.

NAMED AGA DIRECTOR

Election of Ralph T. McElvenny, president of Michigan Consolidated Gas Company, as a director of the American Gas Association, was announced in mid-October.

Cadillac



"Elegance" is the word that expresses it!

There are, to be sure, many ways to describe the superlative motor car pictured above. "Beauty", "majesty", "brilliance"—all apply, in their fullest meaning, to this new Cadillac. And yet, from this wonderful vocabulary, we have selected "elegance" as the word that most fully characterizes the Cadillac of 1960. The car's beautiful, clean-lined styling is certainly elegant beyond compare. Its new interior luxury provides a feeling of elegance that can be sensed nowhere else in the world of motor cars. And even its new performance—smooth, quiet and effortless—might be summarized as "elegance in motion". Once you have seen and driven it for yourself, we think you will agree that the word is "elegance"—and that the car is Cadillac! Your authorized Cadillac dealer suggests a visit, soon!

VISIT YOUR LOCAL AUTHORIZED CADILLAC DEALER

A classic grille and an impressive hood of airfoil design complement sculptured side styling on this Pontiac Star Chief sports sedan. The Star Chief name on the front fender and four star emblems on the rear readily identify this series.

This 1960 Bonneville sport coupe illustrates Pontiac's new grille, classical in design, for 1960, with a massive new bumper and low hood. This same body style also is available in 1960 in the Star Chief, Catalina and new Ventura series.

Pontiac Adds Ventura Series For 1960

Sixteen new models in four series, marking the greatest engineering and styling advances ever achieved by the company, were revealed by S. E. Knudsen, GM vice-president and general manager of Pontiac Motor Division, in announcing the 1960 line of Pontiac cars.

Gentle curves and flowing lines of sculptured beauty readily identify Pontiac's completely new line of cars. The classic styling and wide track design prevails throughout each series, from the luxurious Bonneville and Star Chief to the Catalina and the newly introduced Ventura series.

47 New Features

The Catalina series offers seven body styles—a two and four-door sedan, a two and four-door hardtop, a six and nine-passenger, four-door Safari, and a convertible. The new Ventura series has a two and a four-door hardtop. In the Star Chief series, there are a two and four-door sedan, and a four-door hardtop. The Bonneville presents four glamorous models—a two and four-door hardtop, a custom convertible and a custom Safari.

Heading a list of 47 new features is the appearance of the 1960 Pontiac with its new "V" design front end. A massive front bumper juts forward below a classical grille formed by seven narrow, gleaming bars, with twin headlamps set at either end. The distinctively different grille, the one-piece bumper, and the sharp line of the hood offer overall simplicity and beauty.

Complementing the new low styling motif is a Vista-Panoramic windshield and a generous wrap-around rear window, with a low-cut roof. Even more pronounced a departure from 1959 styling is the sculptured deck lid and rear fenders topped by twin dual tail lamps housed in individual cones extending toward the back window. Below each set of tail lamps are long back-up lamp ports framed in chromium. The deck flares downward to blend with the massive wrap-around rear bumper. Below the front fender series nameplate on each model a thin-line trim molding extends the full length of the car. The upper edge of the rear quarter panel also is highlighted by a trim molding.

More Powerful Engine

Priced just above the Catalina series are two Ventura models, a four-door and a two-door hardtop. They have interiors trimmed in customized Morrokide available in many different shades to harmonize with exterior finishes.

The Bonneville and Star Chief series have a 124-inch wheelbase and are 220.7 inches overall, except for the Bonneville Safari which has the same dimensions as the Catalina and the new Ventura series—122-inch wheelbase and 213.7 inches overall length. Overall heights range from 54.2 inches for all sport coupe models to 56.8 inches for station wagons.

Pontiac's Tempest 425 V-8 engine is more powerful than ever. Standard compression ratios are 8.6 to 1 for regular fuel engines with Synchromesh transmission and 10.25 to 1 for premium fuel engines with Super Hydra-Matic transmissions.

Available in all four series is a premium fuel, extra high perfoming 10.75 to 1 compression ratio engine with three 2-barrel carburetors for either Synchromesh or Hydra-Matic transmissions.

A regular fuel economy engine with 8.6 to 1 compression ratio is available for all models equipped with Hydra-Matic. A new two-barrel carburetor, a highly efficient camshaft and low axle ratios starting at 2.69 to 1 are designed for increased gasoline mileage and operation economy.

Pontiac's famed wide track wheels and smooth ride are further improved in 1960 with large rubber bushings in the rear suspension, new type rear shock absorbers and a raised rear axle upper control arm. Additional sound insulation has been provided for a quieter ride.

The new Hydra-Matic transmission is narrower and lighter and allows for a smaller tunnel, thus increasing passenger room. New radio and optional rear speaker systems for all series employ tone control with sound separation for a stereo effect.

New Throttle Control

Specially intended for turnpike driving, a new throttle control accessory, called Magi-Cruise, can be set to retain a constant accelerator position after the driver removes his foot from the pedal, thus relieving the foot of constant accelerator pressure.

Other new items include a spot beam reading lamp, a rear deck release that can be controlled from the passenger car compartment, rear window and side screens for station wagon models, remote controlled outside rear view mirror, a Safe-guard speedometer, and a low fuel indicator.

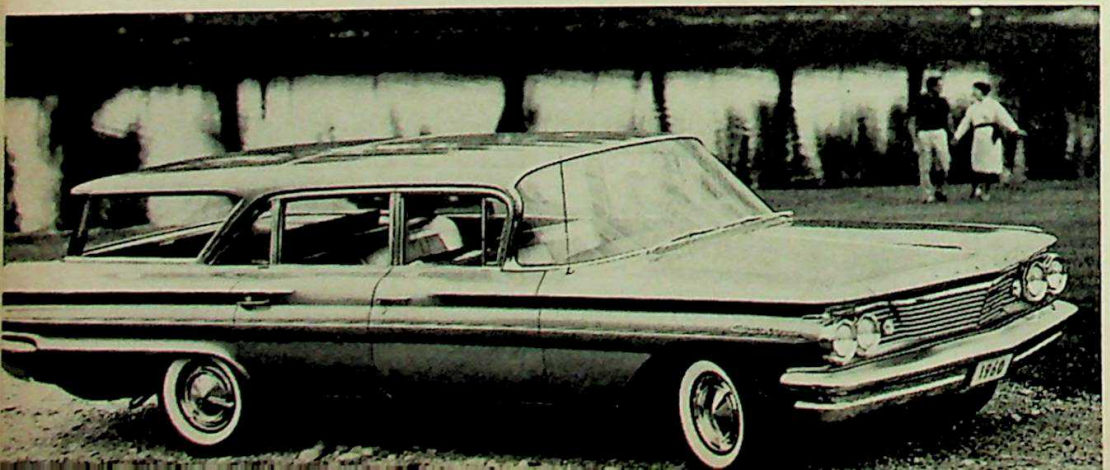
Fifteen solid paint colors and 60 two-tone combinations are offered with the 1960 Pontiacs. Harmonizing with exterior colors are 51 interior color and material combinations of cloth, Morrokide and genuine leather.

DECLARES EXTRA DIVIDEND

Scotten-Dillon Co., Detroit, has declared a quarterly dividend of 35 cents a share, plus an extra five cents a share on the common stock, payable Nov. 14 to stockholders of record on Oct. 23.

CHOOSES LANSING AGENCY

Woodlin Metal Products Company, Marshall, manufacturer of mobile home windows, ventilating equipment and furniture, has appointed Jepson-Murray Advertising, Inc., Lansing, as its advertising agency.

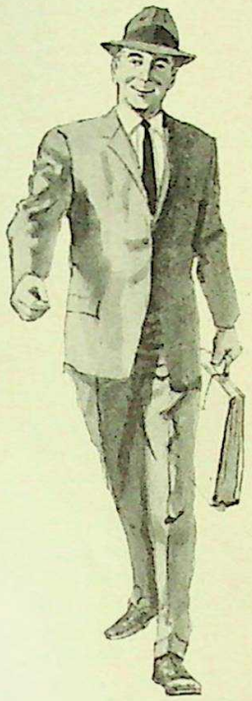


★ ★ ★

Ideal for pleasure and performance is this 1960 nine-passenger Pontiac Catalina Safari with its husky V-8 engine. Smooth, quiet and powerful, yet selling at prices close to the lowest, the smartly styled Safaris are one of the most popular in Pontiac's 16 models for 1960.

A new series, the Ventura, has been added for 1960, with two body styles—a two and a four-door hardtop.

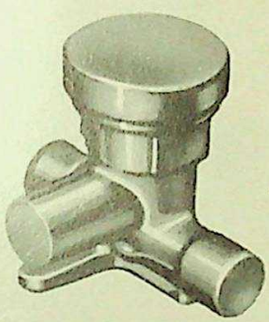
★ ★ ★



THE MAN FROM MUELLER BRASS CO.

REPRESENTS *ONE DEPENDABLE SOURCE* FOR ALL THESE COPPER AND BRASS PRODUCTS

Because the diversified facilities of his company encompass a wide range of manufacturing methods, the Man From Mueller Brass Co. is in the unique position of being able to offer you an intelligent, unbiased analysis and recommendation of the one best method of producing your particular part. When you are designing, specifying and purchasing fabricated parts . . . call in the Man From Mueller Brass Co. You will get the *best product* at the *best price* . . . made the *one best way!*



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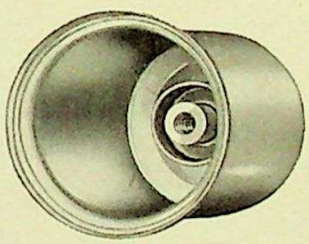
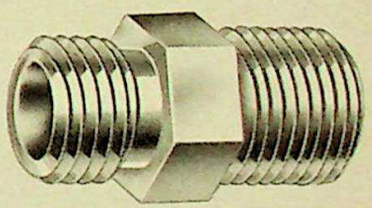


COLD-PREST® IMPACT EXTRUSIONS



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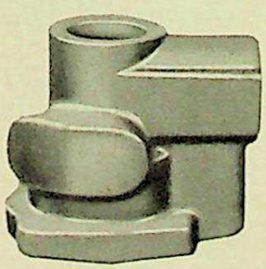

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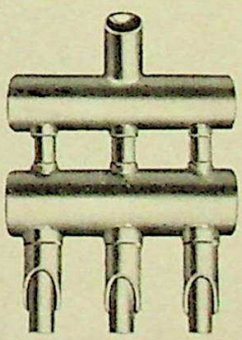

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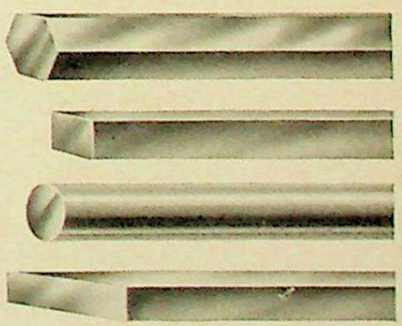


RED TIP® BRASS ROD

287

MUELLER BRASS CO. PORT HURON 59, MICHIGAN

★ ★ ★

Carrying six passengers with ease, the economy Valiant is powered by a completely new inclined six-cylinder engine that delivers 101 horsepower at 4400 r. p. m.

It has a wheelbase of 106.5 inches, overall length of 184 inches, overall width of 70.4 inches, and overall height of 54 inches. The V-100 sedan weighs only 2,635 pounds.

★ ★ ★

Valiant Has 101-Horsepower Engine

Four-door sedans in both the V100 and V200 series of Chrysler Corporation's lightweight 101-horsepower Valiant made their appearance in dealer showrooms on Oct. 29. Station wagon models, including a six or nine-passenger series, will be in production later in November.

In all, there will be six models including a 4-door, 6-passenger sedan; a 4-door, 2-seat Suburban; and a 4-door, 3-seat Suburban; in each of the two series.

800 Cars Daily

Production currently is confined to the corporation's Hamtramck plant, where a goal of 880 Valiants daily is the target. Output now exceeds 600 units daily. Later this year, production of Valiants is scheduled for the St. Louis plant, and if demand warrants it, additional production will be possible in the Los Angeles plant.

At a press preview of the Valiant late in October, Harry E. Chesebrough, general manager of the Plymouth-De Soto-Valiant Division, revealed that the Valiant's completely new 30-degree inclined 6-cylinder engine delivers 101 horsepower at 4400 r. p. m. Torque is rated at 155 foot pounds at 2400 r. p. m.

The weight of the Valiant is 2,635 pounds for the four-door sedan in the V100 line, and 2,655 for the four-door sedan in the top line V200.

"The new Valiant six-cylinder engine was designed to be the most efficient of its kind ever developed," Chesebrough said. "It has the horsepower to meet all motoring needs, and yet it is still highly economical. We are confident it offers the perfect combination of performance and economy."

Summing up the outstanding features of the new Valiant, Chesebrough listed the following:

- Outstanding low initial price and low maintenance costs.
- At 184 inches, it is shorter in size than standard American cars, but not short in value.
- With an overall width of 70.4 inches and an overall height of 54 inches, it is comfortable for a family of six.
- It is outstanding for fuel economy, getting 30 miles per gallon in highway driving.
- Featuring full unit construction, it is corrosion protected by a seven-dip immersion process.
- It is a capable highway performer with brisk acceleration.

Adequate Trunk Compartment

- The trunk compartment provides 24.9 cubic feet of luggage capacity, and still has a concealed spare tire in a sunken tire well.

The front of the car, like the rear, has a sports car flavor, provided in a large part by the wide, functional recessed grille of bright aluminum. Dual headlamps are set flush into a black field, with lamps and grille smoothly integrated by sculptured hood and fender lines.

Canted, oval tail lamps are located high, where they may be easily seen, and back-up lights are located at the rearmost turn of the body sheet metal.

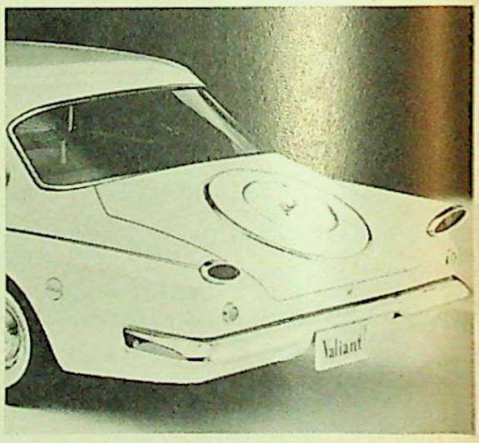
The deck is large, with a simulated wheel cover stamped into it to add a sports car flavor.

Doors are large and reach well into the roof line, and the window areas are large, extending down into the door sides.

A new electrical generating system designed around an alternator results in adequate current generation at idle speeds, something the conventional generator does not do. It is particularly advantageous during slow-speed winter driving when the heater, headlights and windshield wipers are operating simultaneously. It also leaves the battery in a more fully-charged state for fast cold-morning starts.

TorqueFlite Principles

A new three-speed automatic transmission incorporates the principles of the TorqueFlite. This new unit is extremely light in weight, more than 100 pounds less than the TorqueFlite used with V-8 engines. The torque converter and transmission are encased in a one-piece housing of die-cast aluminum, and the transmission extension also is an aluminum die casting.



Rear end of the new Valiant, showing the sport deck and sculptured styling of this new entry of Chrysler Corporation in the family-size economy car field.

The Valiant also features a completely new three-speed manual transmission, a lightweight unit designed specifically for its economy engine. The stick is of a new "curved" design.

Both Valiant series are available in black, white, metallic blue, metallic green, and silver-gray. In addition, red is exclusive to the V200.

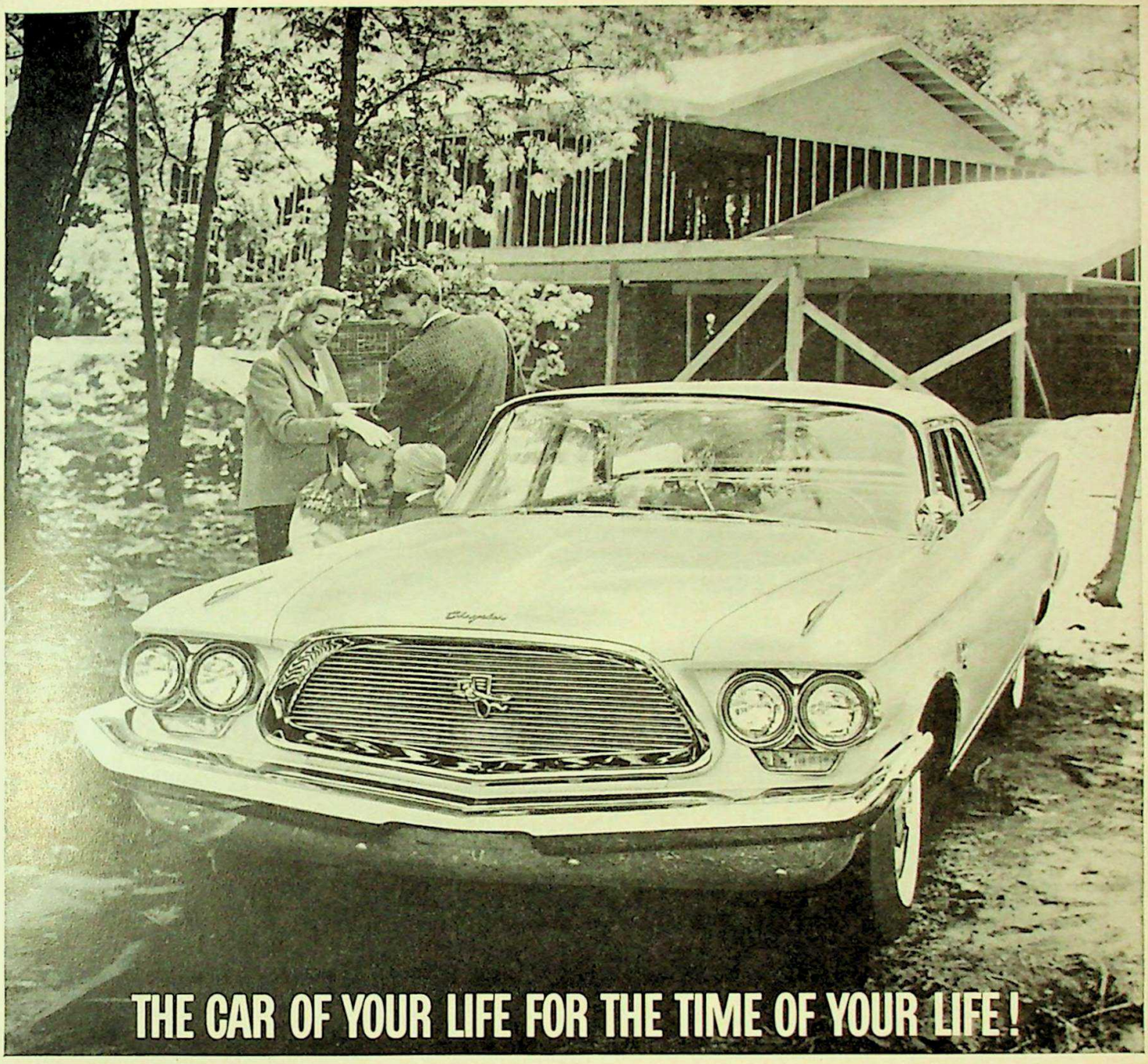
Chrysler Reveals Valiant Car Prices

Factory retail prices of Chrysler Corporation's new economy car, the Valiant, were revealed late in October as it made its appearance initially in New York City. The car eventually will be available in six models in a four-door sedan and station wagon series.

Prices on the four-door sedans are from a low of $1,874 on the V-100 series to $1,946 on the V-200 series. Station wagon prices will be announced when the six-passenger and nine-passenger models go into production later.

Prices of options and accessories on the Valiant were also announced as follows: Heater, $69.10; push button radio, ~~$54.30;~~ three-speed, push-button transmission, $158.75; power brakes, $37.50; power steering, $67.50; vacuum-operated windshield washers, $10.90; a deluxe group (consisting of a special steering wheel, deluxe floor covering and upper door chrome mouldings), $27.65; and white side wall tires, $27.00.

All prices listed are factory retail at Detroit, and do not include distribution, excise taxes, handling charges, dealer delivery charges or state and local taxes.



the completely new

1960 CHRYSLER

This is a whole new kind of Chrysler. New in concept! New in construction! New in detail! Never before has a car done so much to bring new excitement to your driving.

New beauty makes this Chrysler a joy to see and be seen in. Styling's as fresh as the new decade for which it was designed.

New three-dimensional Astra Dome panel puts controls fingertip close. New Panelescent lighting makes instruments instantly easy to read.

New pushbutton controls make driving a soft touch. Transmission, heater, air conditioner are all pushbutton controlled.

New Roominess makes this Chrysler the most comfortable car you've ever known. Here's more headroom, legroom, kneeroom—real sprawl-out room for six.

New Unibody construction is the secret behind Chrysler roominess. Quieter, stronger, rattlefree. Body and frame are constructed as a single unit.

See and drive the car of your life. Your dealer will arrange it.

This is Chrysler's greatest . . . the lion-hearted 1960 CHRYSLER

How to design a DIP in shipping costs

One of the foremost opportunities for savings in shipping costs lies in the design of the hauling equipment itself. The more closely it matches your particular needs, the more profitable and less costly it is to operate. Trouble is, that few if any, factory designed trailer models are fully suited to *your* loads or *your* service conditions.

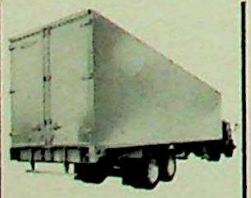
Trailmobile CID Series '60 solves this problem. CID—which means Customer Individualized Design — achieves this desirable end by letting you select the components and features that will constitute the ideal trailer for your operations. And by this means you achieve economies available in no other way. In effect, *you* design a dip in shipping costs.

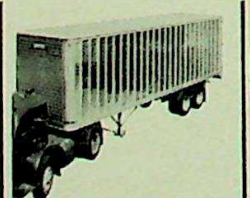
Please check with any of the locations below for full details on this new way to save.

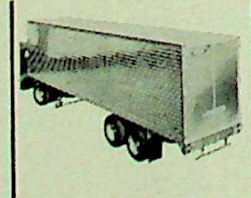
TRAILMOBILE ***CID** SERIES '60

Trailmobile Inc., 4111 Central Avenue, Detroit 10, Michigan
Trailmobile Inc., First and Turner Streets, N.W., Grand Rapids 4, Michigan
Scientific Brake & Equipment Co., 314 W. Genessee Avenue, Saginaw, Michigan

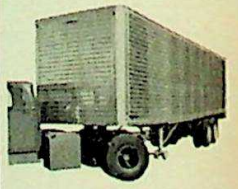
the **P-64**


the **P-68**


the **C-64**


the **C-68**

the **L-64**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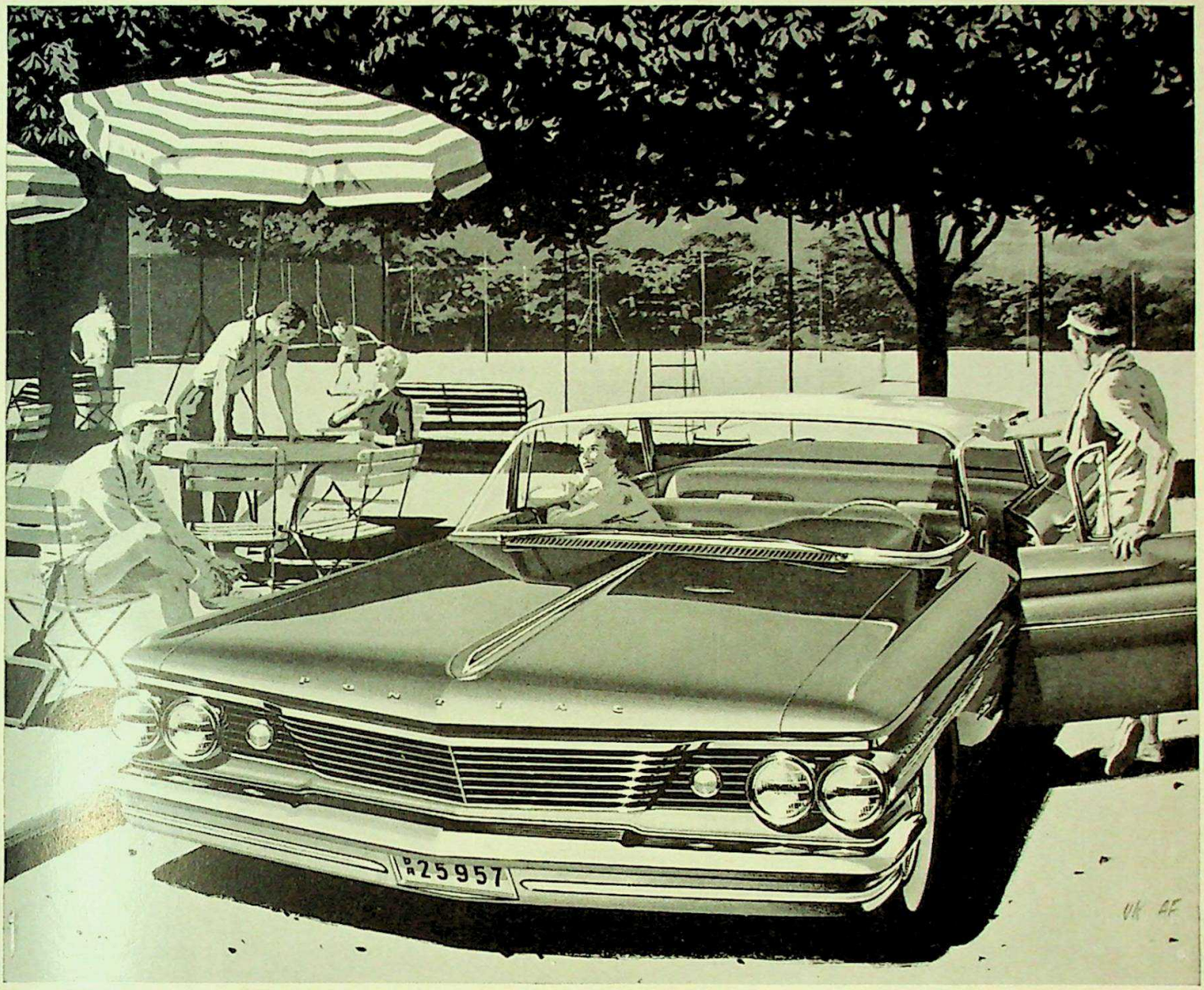


The Pontiac Bonneville Vista for 1960

Pontiac serves you a beauty with perfect form on Wide-Track Wheels

It's no coincidence that so many Pontiac owners are sports-minded.

The love of sports is the love of action. To like the spirit of competition is to like the spirited, that which is game, alive, ready.

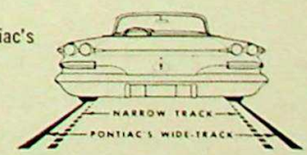
Check the physique of this 1960 Pontiac. If this fresh, clean styling doesn't quicken your hankering for the fine sport of owning and driving a great automobile, see your team physician at once.

And when it starts to perform, there's no serious competitor to be found. Wide-Track Wheels give it remarkably steady footwork. It's devoutly obedient to your coaching, takes your direction instantly, gracefully.

Its power plant — accurately called the Tempest V-8 engine — is resourcefully athletic, with precision timing, crisp take-offs, perennial endurance. There's a whole team of engines for you to choose from — for either high performance or regular-gasoline economy.

Enough of this being on the sidelines of Pontiac enjoyment! See one of our fine dealers this week for some revealingly pleasant practice in a new 1960 Pontiac.

With the widest track of any car, Pontiac's width is on the road—where it gives you better stability. Wide-Track widens the stance, not the car.

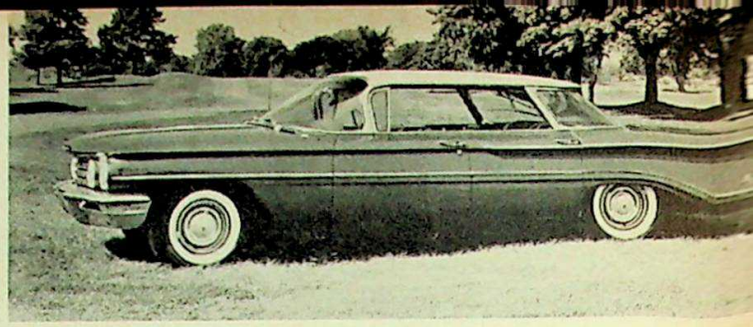


PONTIAC

THE ONLY CAR WITH WIDE-TRACK WHEELS

PONTIAC MOTOR DIVISION • GENERAL MOTORS CORPORATION

The Oldsmobile Series "98" convertible, shown here, has as standard equipment a Premium Rocket engine with displacement of 394 cubic inches, compression ratio of 9.75 to 1. It develops 315 horsepower.



Shown here is the Oldsmobile Super "88" four-door Sport Sedan with a wheelbase of 123 inches, overall length of 217.6 inches, overall width of 80.6 inches, and overall height of 54.2 inches.

Oldsmobile's Balanced Design Styling

Further advances in economy of operation, new tailored styling and a new balance of design are incorporated in the 17 new Oldsmobile models for 1960.

A redesigned Rocket engine in the Dynamic "88" series for use with lower cost regular grade gasoline gives an improvement of 15 cents in miles per dollar while maintaining excellent performance, according to Jack F. Wolfram, Oldsmobile general manager and GM vice-president.

In all series there are new rear axle ratios and many other engineering advancements, while two new 3-seat Fiestas have been added to the station wagon line.

New Curved Grille

"The balanced design of the car is new from every view—front, side and rear," Wolfram points out. "We believe the new cars have the styling our customers want, the full-family spaciousness they need and the luxurious interiors they asked."

Bright chrome plated bars in groups of three give the 1960 Oldsmobile curved grille a wide, stable look even though the car itself is no wider than the 1959 models. Headlights are placed horizontally with the outboard pair set slightly behind the inboard pair. The parking lights are safely recessed in the wrap-around section of the bumper where they can be seen easily from front or side.

The lower and slightly rounded styling of the new front end aids maneuverability, especially in tight parking situations. Maneuverability is increased 2¼ to 3½ inches. The lower hood affords a better view forward and to the sides.

The flowing lines are emphasized by a chrome accent strip which starts at the headlight on the front fender, sweeps back to the rear quarter where it dips down to the lower edge and rearward to the new bumper.

The low-level design motif also is incorporated in the expansive "clean-sweep" rear deck which slopes gently downward to give maximum rear vision and parking ease. The Oldsmobile emblem in the center of the deck lid may be used as a convenient handle when opening and closing the trunk.

Taillights are molded into the rear fenders in a high, easy-to-see position. Below the attractive angled bumper is ribbed heavy gauge steel that completes the solid, built-to-the-road appearance.

Oldsmobile has developed a new balance of power and economy for 1960 in the Dynamic "88" series, Wolfram stated. The Regular Rocket engine, standard for the series, is a high compression engine designed for the most efficient use of regular grade gasolines. This was accomplished through design changes in combustion chamber contour, piston and camshaft, and the changing of the compression ratio to 8.75 to 1. The engine has a displacement of 371 cubic inches and develops 240 horsepower. It incorporates a new two-barrel "Econ-O-Way" carburetor recalibrated for maximum economy and power at the new compression ratio.

Offers Premium Engine

Used with the new standard 2.87 to 1 axle ratio and Jet-Away Hydra-Matic transmission, it gives a 15 per cent improvement in miles per dollar.

For the motorist who wants super performance, Oldsmobile's top power plant, the Premium Rocket engine is standard on the Super "88" and the "98" series. This engine is designed to take full advantage of the power potential in today's premium fuels. It has a displacement of 394 cubic inches, a compression ratio of 9.75 to 1, and develops 315 horsepower.

The standard rear axle ratio in each series Oldsmobile for 1960 has been lowered. This results in reduced engine speeds and a marked improvement in quieter engine operation, better economy, less wear and greater durability.

Two new body styles have been added to the 1960 lines. They are the three-seat Fiesta station wagons in the Dynamic "88" and the Super "88" series. This means that Oldsmobile now has four Fiesta body styles with two of them featuring a full-size, rear-facing third seat. The third seat folds flat with one motion when not in use.

A redesigned second seat in all 1960 Fiesta station wagons provides a four-inch wider cushion. In addition to increased seat area, this makes entry and exit easier.

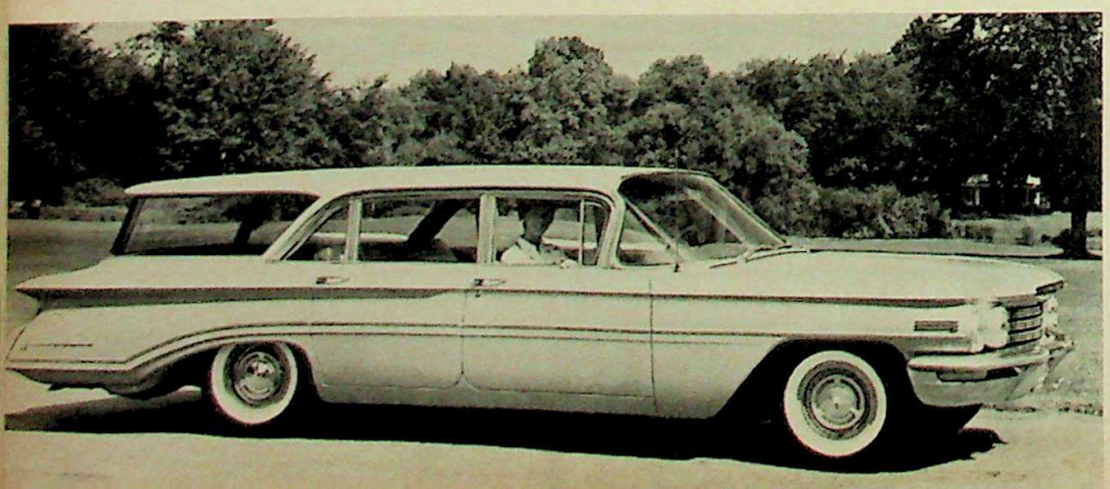
Seating Comfort Enhanced

A new measure of driving pleasure results from the new Quadri-Balanced Ride. For 1960, Oldsmobile has also added new nylon sleeve shock absorbers and live rubber body mounts to the Guard-Beam frame and wide-stance chassis. A new fluid, less affected by temperature changes, is used in the shock absorbers to assure the best possible ride under all driving conditions.

The new slim line design of the Hydra-Matic transmission permits a reduction of the front transmission tunnel of 20 per cent, resulting in more front seat leg room.

The new cars have been further improved by changing the front seat angle for more comfortable seating and revising the seat springs for improved back support and better cushion softness. Rear entrance room has been enhanced by increasing the door opening angle, allowing it to swing open five inches more.

Fifteen "Magic-Mirror" exterior color finishes add new beauty to the 1960 line. There are 30 regular two-tones and 60 possible color combinations. These durable acrylic base paints are standard finishes on all models.



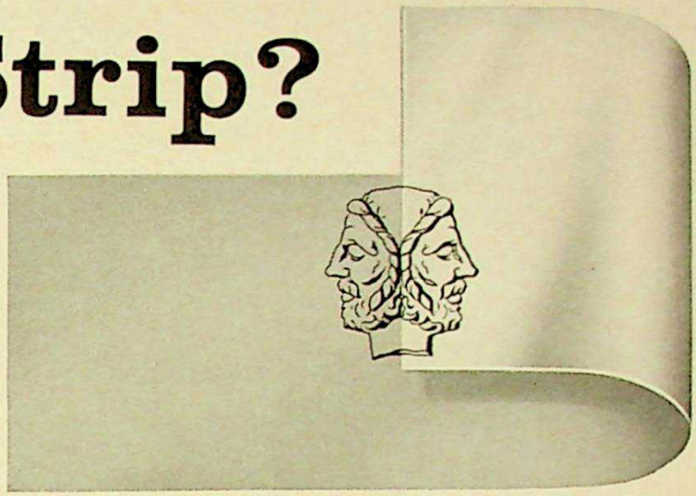
★ ★ ★

Oldsmobile for 1960 offers four distinctive models in its Fiesta station wagon series. In both the Dynamic "88" series and the Super "88" series, there are two-seat and three-seat models. The three-seat models feature a rear-facing third seat, which folds flat when not in use.

Another feature of the Dynamic "88" Fiesta, shown here, is the Regular Rocket engine designed to give excellent performance on regular grade gasoline.

★ ★ ★

Ever hear of "2-Faced" Strip?



"2-Faced" DSC *Accutronic** STRIP with "differential finish" helps stampers overcome effects of non-uniform metal flow in draw dies

Some years ago a stamper we know ran into a serious production snag on a seemingly simple job intended for chrome plating. The trouble—ripples, buckles and breakage in the draw.

How the "2-Faced" strip idea popped

When every shop-suggested remedy failed, an SOS (in DSC parlance: "Service on Stampings") brought a DSC metallurgist and a production man. They checked over the job completely—the steel, the dies and the drawing compound. Everything seemed to jibe . . . but the trouble persisted. Off by themselves, one said, "Looks like a case of non-uniform metal flow. Satin finish would help but they need bright." Right then and there the idea popped. "Let's try a side of each, bright on top, satin beneath."

It works

A few days later an assortment of samples was submitted for tryout. Sure enough, one combination of bright and a certain shade of satin showed no ripples, buckles or breaks. Since then DSC "2-faced" or "differential finish" strip has helped other stampers solve similar problems.

A recent case

A maker of electrical lighting fixtures complained that one of his reflector jobs was a "loser." The cost of polishing out the wrinkles that kept showing up in the draw was pirating his profits—but he couldn't throw the job out of his line for competitive reasons.

You guessed it . . . DSC Accutronic* STRIP with bright topside and job-suited satin underneath healed the job.

No-cure-all, but . . .

Is DSC "differential finish" a cure-all? Of course not. But it has worked successfully when all else failed and when the steel and the job are properly mated. The cases cited show how DSC approaches problem-solving on stampings and roll-formings.

Maybe we can be helpful on a job of yours . . . Just call your nearest DSC Customer "Rep" or write direct to Detroit Steel Corporation, Box 4308, Detroit 9, Mich.

The PROOF of

DETROIT STEEL

is in its performance on your job

Customer satisfaction is our No. 1 Job.

DSC PRODUCTS: Coke.....Coal Chemicals.....Pig Iron Basic Open Hearth Steel Ingots, Blooms, Slabs, Billets, Rods HR and CR Sheet and Strip.....Flat CR Spring Steel Mfrs.' and H. C. Specialty Wire.....Welded Wire Fabric

*Accutronic is a DSC TRADE-MARK, descriptive of DSC CR Sheet and Strip Steels, cold reduced on mills equipped with AccuRay** electronic feed-back thickness-control systems. PURPOSE: LEVEL GAUGE and EVEN TEMPER.

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DETROIT DISTRICT CUSTOMER "REP" OFFICES

Dan H. Mathews, Manager

R. J. Herbenar, Assistant Manager

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Grand Rapids 6	1331 Lake Drive S.E.	GLendale 6-9569
Jackson	801 Reynolds Building	STate 4-6189
Toledo 13, Ohio	2446 Sylvania Ave.	GReenwood 9-1657

This powerful cab-forward Dodge Diesel, featuring a 220-horsepower Cummins engine, is the largest unit in the 1960 Dodge truck line. The NCT1000 model offers a maximum gross vehicle weight rating of 53,000 pounds and a maximum gross combination weight rating of 76,800 pounds.

Featuring a short turning diameter of only 54¼ feet, this Dodge C700 tanker has a maximum gross vehicle weight rating of 25,000 pounds. A 194-horsepower, V-8 engine with 361 cubic-inch displacement is standard on the C700. The 2,000-gallon capacity body is made by Tank Truck Service, Inc.

Dodge Enters Diesel Truck Picture

The 1960 line of Dodge trucks offers 140 basic models, including conventional, cab-forward, 4-wheel drive, forward-control, school bus chassis, and tandem units, it was revealed by M. C. Patterson, Dodge general manager, in announcing the new line early in October.

In the power line-up for 1960 are 11 gasoline engines with a horsepower range from 113 to 228, and four Diesel engines with a horsepower range from 175 to 220, he pointed out.

"We are tremendously proud of our new cab-forward design and Servi-Swing fenders that will enable our new trucks to replace tilt cabs in many operations," Patterson said. "This new cab design will appeal to truck owners who wish to avoid the extra length of conventional models or the extra cost of tilt-cabs. Our new fenders will attract truck operators who want tilt-cab engine accessibility at far less than a tilt-cab price."

Nine New Engines

The Servi-Swing fenders swing out 110 degrees, exposing engine components and accessories that should be frequently checked. Among the components readily accessible by opening the new fenders are the steering gear linkage and housing; air compressor drive belts; generator; distributor; spark plugs; air cleaner; oil dipstick radiator filler; and battery.

In addition to the newly designed fenders on the cab-forward models, Patterson cited the following product highlights of the new Dodge lines:

• A cab-forward design for 18 medium and high tonnage models. With a BBC dimension of only 89¾ inches, the new cab-forward units enable truck operators to pull 35-foot trailers in states permitting 45-foot over-all length, and 40-foot trailers in 50-foot states.

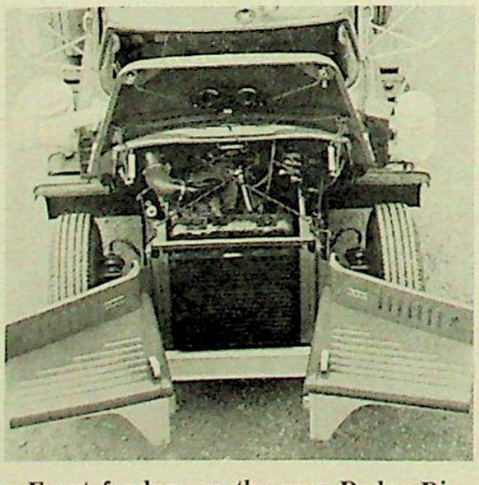
• Increased gross vehicle and combination weights which permit greater payloads. Gross vehicle weights have been increased as much as 4,000 pounds and range to 53,000 pounds. Gross combination weights have been boosted as much as 11,800 pounds and range to 76,800 pounds.

• Availability of five new V-8 gasoline engines for medium and high-tonnage models. There are three new engines with displacements of 361 cubic inches and horsepower ratings of 178, 194 and 204. Two 413 cubic-inch, V-8 engines have been introduced with horsepower ratings of 217 and 228. The new engines feature tri-metal bearings, sodium-cooled, stellite-faced exhaust valves, and water-heated intake manifolds.

New Transmission Group

• Also available, as Dodge enters the Diesel picture, are four Cummins Diesel engines for high-tonnage trucks. They are in the turbo-charged C-175, with 175 horsepower and 464 cubic-inch displacement; the NH-180 with 180 horsepower and 672 cubic-inch displacement; the NH-195 with 195 horsepower and 672 cubic-inch displacement; and the NH-220 with 220 horsepower and 743 cubic-inch displacement.

• A new line of heavy-duty transmissions which includes the new 5-speed New Process 541; the Clark 301-V; the Spicer 6000 Series; Fuller 8 and 10-speed units; and new auxiliary transmissions. The 6-speed Torqmatic, available on 361 cubic-inch engines in 500, 600 and 700 models, features a built-in torque converter hydraulic retarder.



Front fenders on the new Dodge Diesel swing out 110 degrees at the release of a single latch to ensure the fastest, most convenient engine accessibility in the trucking industry.

• Fabricated from heat-treated chrome manganese steel, new frames are standard on all 800, 900 and 1000 models. Tests show these frames are 122 per cent stronger than carbon steel frames, and also are lighter than the latter, enabling truck operators to carry additional payloads.

• A new 13-inch, 2-plate clutch is used with the 413 cubic-inch, 4-barrel carburetor gasoline engine. A new 14-inch, 2-plate clutch is standard with the NH Diesel engines, and a 15-inch, single-plate clutch is standard with the C-175 Diesel engine.

Medium and high-tonnage models have mufflers with all internal parts aluminized, including baffles, tubes and hot-area liners.

Automatic radiator shutters, which assure quick warm-up and economical operating temperatures, are standard on Diesel models and available for heavy-duty gasoline units.

Improved Springs

The new cab-forward trucks have longer and wider front and rear springs, with extra length permitting the spring deflection rate to be reduced for a better ride and the greater width permitting the use of fewer leaves without loss of roll stiffness.

The Sweptline half-ton pick-up features a larger cubic load capacity and bigger brakes. It offers two choices of engines—a thrifty 120-horsepower, 6-cylinder engine, or a rugged 200-horsepower V-8.

The smooth-sided Sweptlines are available in half, three-quarter, and one-ton models, and offer body lengths from 6½ to 9 feet and payloads from 1,775 to 3,475 pounds. Load capacities range from 59.7 to 84 cubic feet.

The Town Panel, with an interior height of 53 inches, is offered with either a 6-cylinder or V-8 engine in a wheelbase of 108 inches.

The Town Wagon can carry up to eight passengers in its three seats. With its two rear seats removed, it provides

(*Continued on Page* 81)

Mighty Satisfying...

OLDSMOBILE FOR 1960

THERE'S NOTHING LIKE A NEW CAR . . . MAKE YOURS A ROCKET OLDS!

Spirited, Super Performance ...that's Oldsmobile's Super 88!

Everything about the value-packed 1960 Super 88 is *super*—the way it is styled outside, the beautiful fashion of its Custom Lounge interior. Very deluxe . . . very *super!*

The way the Super 88 Rockets away is exhilarating—powered by the brilliant new PREMIUM ROCKET Engine that gets the most from premium fuels!

And wait till *you* try Oldsmobile's new Quadri-Balanced Ride with new Vibra-Tuned Body Mountings . . . so smooth, so steady, so silent! It's the most satisfying ride you've ever tried!

OLDSMOBILE DIVISION, GENERAL MOTORS CORPORATION

SEE YOUR LOCAL AUTHORIZED

OLDSMOBILE

QUALITY DEALER

20 Models In Three Dodge Dart Series

Twenty models in three series are offered in the 1960 Dodge Dart, the first completely new full line of automobiles to enter the low-priced field since 1928, M. C. Patterson, Dodge general manager, revealed in announcing the new line early in October.

"These economy cars are designed to compete in price and size, series for series, with the automobile industry's low-priced big three," he declared. "The Dodge Dart makes it the 'big four' now."

118-Inch Wheelbase

The 1960 models are available in three series—the lowest priced Seneca, the Pioneer and the top-series Phoenix. In the Seneca Six series there are a club sedan, a 4-door sedan, and a 6-passenger station wagon, while the Seneca V-8 series also offers a club sedan, 4-door sedan and 6-passenger station wagon.

In the Pioneer Six series there are a club sedan, 2-door hardtop, 4-door sedan and 6-passenger station wagon, while the Pioneer V-8 series offers a club sedan, 2-door hardtop, 4-door sedan, 6-passenger and 9-passenger station wagon.

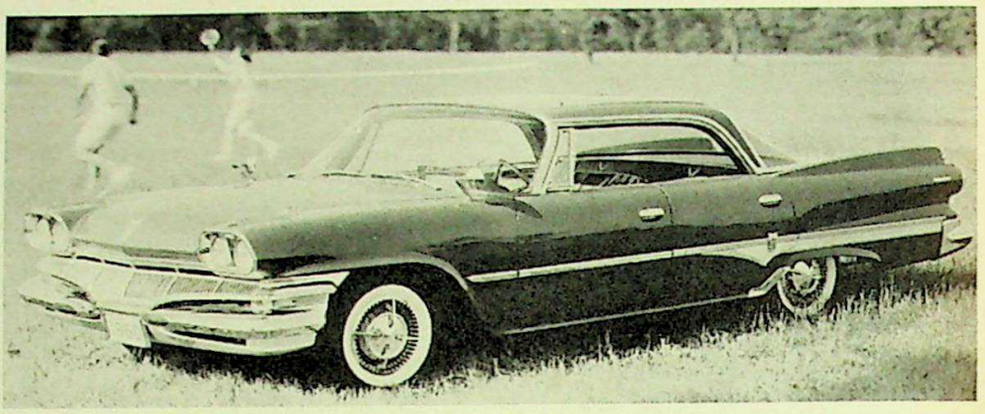
Offered in the Phoenix V-8 series are a 2-door hardtop, 4-door sedan, 4-door hardtop and a convertible.

The new Dodge Dart not only is sleek looking, with compact sculptured lines, but it also provides exceptional roadability and handling ease because of its new Unibody construction, engines, Torsion-Aire ride and a 118-inch wheelbase.

Newly Styled Grille

The front features a grille with vertical bars that curve down and forward from the hood. Dual headlights and a massive bumper also highlight the front styling. From the side, the car is accented by a horizontal molding that begins ahead of the front door and extends to the rear bumper. The rear fender rises almost imperceptibly to its extremity, except in the station wagons where a small fin is canted outward from the body line.

The rear bumper has smooth lines and includes the gas filler in the bumper and round, well-protected back-up lights. The rear license plate is inset in the broad surface of the deck lid.



This four-door hardtop in the Phoenix series is one of the 20 low-price Dodge Dart models offered for 1960. Suggested factory list prices range from $2,076 for the Seneca Six club sedan to $2,758 for the 9-passenger Pioneer V-8 station wagon.

A completely new, six-cylinder engine, inclined at an angle of 30 degrees in the engine compartment, is designed to provide peak economy. A choice of engines, designed to use regular grade fuel and to suit the needs of every buyer, is offered.

The Seneca and Pioneer models feature the new 225-cubic-inch Economy Slant "6" as standard equipment, and make available as an option the 318 cubic-inch Red Ram V-8 engine with a two-barrel carburetor. The former is rated at 145 horsepower and the latter at 230 horsepower.

310 Horsepower Engine Optional

The top-line Phoenix has a 318 cubic-inch Red Ram V-8 with four-barrel carburetor as standard equipment. It is rated at 255 horsepower. The new "D-500" ram induction engine also is available in this model with 383 cubic-inch displacement. It develops 310 horsepower.

Matching the six-cylinder engine is a completely new automatic transmission—the TorqueFlite "Six," featuring fully automatic three-speed torque converter shifting.

The new Unibody construction provides an integrated body and frame in a single unified structure which gives extra room on the inside, including spacious legroom, ample headroom and high seats, and greater structural strength. It also provides a higher level of comfort and quiet for the driver and passengers.

Twenty separate operations are involved in a new body protection and finishing process, including seven different dipping steps, seven external sprays and six coats of sealers, primers and "Lustre-Bond" enamels.

Swivel Seats Optional

Optional automatic swivel seats swing out to meet you when the door next to the empty seat is opened, and then swing back to the straight ahead position when the door is closed. When a driver or passenger is in the seat, he need only move his body to get out and the seat will swivel.

A safety feature is the optional "Child Guard" vacuum-powered door locks that operate from an instrument panel switch to provide one-switch locking and unlocking of all doors and tailgate window on wagons. Another is a four-light warning flasher system, dealer installed, that causes all turn-signal lights to flash continuously for safety when stopped on the highway.

An all-aluminized exhaust system offers up to double the life of exhaust components.

Wide Choice Of Interiors

There is a wide choice of harmonizing easy-to-clean interiors, all color-keyed to the exteriors. There is leather-grained all-vinyl, or a combination of colorfast nylon warp fabrics and long-lasting vinyl.

On the station wagons, a chrome, contour luggage rack, dealer installed, holds up to 25 square feet of roof-top cargo.

A power-operated tailgate window, with control switches on the instrument panel and above the rear window, is standard for the nine-passenger and optional on the six passenger wagons.

The 1960 Dodge Dart station wagons are offered in 6-pasenger and 9-passenger models, with a choice of 6 or 8-cylinder engines. Shown here is the 9-passenger Pioneer station wagon.

AUTOLITE VOTES EXTRA

Directors of The Electric Autolite Company have declared a quarterly dividend of 60 cents a share, and a year-end extra of 50 cents a share, both payable Dec. 18 to stockholders of record on Dec. 3.

For Snoqualmie Pass, it's CONCRETE...

the only pavement with built-in protection against weather damage

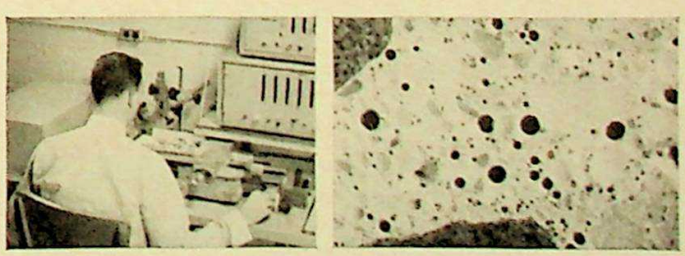
High in the Cascade Mountains of Washington, new Interstate 90 year in and year out must face the toughest punishment weather can give.

Snows are mighty heavy in Snoqualmie Pass. 30 feet a year is nothing unusual. For 5 months every year, it takes the biggest and heaviest snow removal equipment in the business to keep the road passable.

Traffic is plentiful and, when the road is posted, every car uses chains designed to take a deep bite. This is really tough on the road surface—but concrete is meeting every test.

As a special safeguard, bubbles by the billions (air entrainment) have been put into this concrete. And through temperature changes and repeated freezing and thawing, the surface is kept free of any scaling or break-up. Even tons of de-icers can't cause harm.

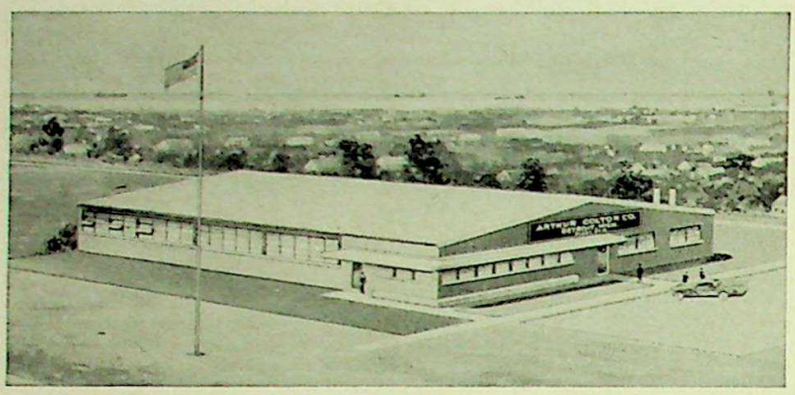
Here's a perfect example of the *stability* found in concrete under the most difficult and extreme conditions. One more reason why you're seeing so many new concrete highways. They are stretching out mile after mile on Interstate and other heavy-duty routes everywhere.



Checking bubbles by the billions, the "air void analyzer" gives an electronic control on air entrainment. Some 5 million bubbles per cubic inch of concrete (magnified specimen at right) give freezing moisture the room to expand.

PORTLAND CEMENT ASSOCIATION
2108 Michigan National Tower, Lansing 8, Mich.
A national organization to improve and extend the uses of concrete

ANOTHER EXPANSION to better serve Michigan, the nation and the world



PLANT No. 4—ELK RAPIDS, MICHIGAN

PLANT No. 2—DETROIT, MICHIGAN

PLANT No. 3—MANCELONA, MICHIGAN

The recent opening of our Plant No. 4 in Elk Rapids, Michigan, marks the fourth expansion in our manufacturing facilities since we set up in business 35 years ago. In the intervening years, we have earned an international reputation for designing and building money-saving machine tools for many types of industries. We have also diversified our engineering and production talents so that our machines, which originally were specialized in metal-cutting operations, now reach into the nuclear power, electronic, chemical, drug, cosmetic and food industries and are used in processing many household products in everyday family use. To the many people who have helped us build this business, we say, "Thank you, sincerely."

SNYDER CORPORATION
and our subsidiary

ARTHUR COLTON COMPANY

3400 E. Lafayette Avenue • Detroit 7, Michigan

PLANT NO. 1—DETROIT, MICHIGAN

THE TURBINE DRIVE BUICK '60

Today's Buick gives you a sense of command and well being on the road that can be felt in no other car—simply because its numerous extra quality features are built into no other car. For instance, Buick alone offers you: the jet-smoothness of Turbine Drive Transmission*, the unsurpassed safety of aluminum-drum brakes, the efficiency and economy of Wildcat V-8 engines, the clarity of an adjustable "Mirromagic" instrument viewer, the convenience of an exclusive automatic "Twilight Sentinel" headlight control**, the deeper cushioned comfort of rich new interiors.

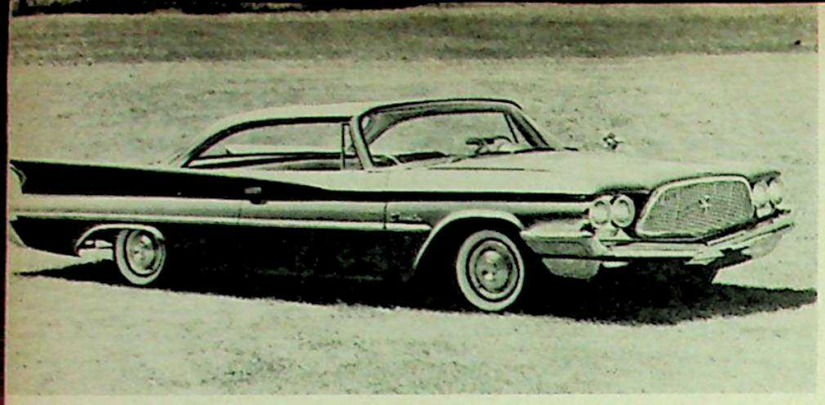
The only sure way to get Buick quality is to buy a Buick—any Turbine Drive Buick '60. This is Buick's all-time best—and *yours!*

***Optional at extra cost.*
**Optional at extra cost on LeSabre, standard on Invicta & Electra.*

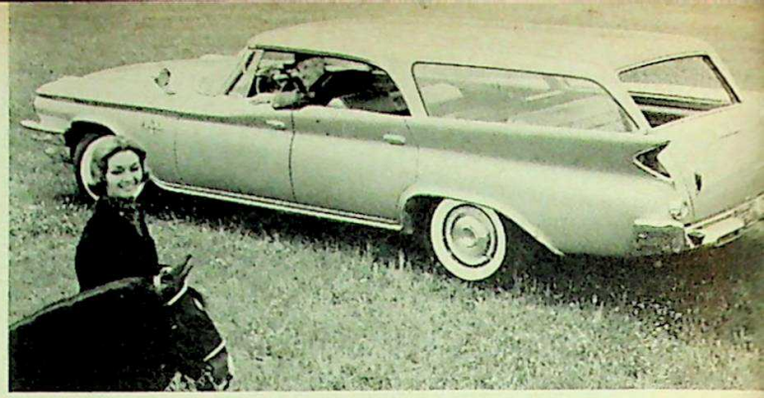
BUICK'S ALL-TIME BEST

BUICK MOTOR DIVISION, GENERAL MOTORS CORP.

BUICK LESABRE—The Lowest-Priced Buick **BUICK INVICTA**—The High-Performance Buick **BUICK ELECTRA**—The Finest Buick of All



The 1960 Chrysler Windsor two-door hardtop features more headroom and legroom, improved automatic swivel seats, an improved Auto-Pilot, and offers a complete range of power assists.



Shown here is the 1960 Chrysler New Yorker Town and Country Wagon, offering more room inside and luxurious interior appointments. There also is a Town and Country Wagon in the Windsor line.

Chrysler Stresses Interior Roominess

Described by C. E. Briggs, Chrysler Corporation vice-president and general manager of the Chrysler and Imperial Division, as "completely new in styling, the quietest operating cars ever built and the roomiest inside since 1956," the 1960 Chrysler models went on display in dealer showrooms on Oct. 16th.

"Unibody design and construction have enabled our stylists to create a beautiful low silhouette and at the same time give passengers even more room inside," Briggs said. "We think interior roominess, seating comfort and ease in entrance and exit are going to be tremendously important factors in the sale of cars this year and in the years ahead. Our 1960 models were designed with this in mind."

300-F Series Later

Chrysler New Yorkers and Windsors are being offered in sedan, two and four-door hardtop, Town and Country Wagon and convertible body styles. Saratogas are offered in two and four-door hardtop and sedan body styles. A 300-F series, including a two-door hard-top and a convertible, is scheduled for later introduction.

Unibody construction, in which the body and frame are integrated into a single unified structure, together with a new seven-stage rustproofing process, assure greater durability and lower maintenance costs.

The 1960 models are styled in bold, uncluttered lines inspired by the Chrysler 300 series. The shape of the grille opening resembles that of Chrysler's recent model high performance cars. Body sculpturing and trim emphasize length and lowness, with restraint in the use of chrome.

Hardtop versions of Chrysler Town and Country wagons are offered for the first time, and Chrysler's Flight-Sweep deck lid with simulated spare tire mount, is available as optional equipment.

Unibody Construction

Unibody construction has made the new cars quieter, structurally safer, and more roadable. A lower floor has provided more leg room in both front and rear seats.

Sills, fenders and all other structural underbody parts receive a new unique rust-proofiing treatment consisting of a seven-stage body dip process which improves rust protection by 500 per cent.

Roomier interiors are decorated in more expensive fabrics, especially the 1960 New Yorker, which is being offered with the first all-wool broadcloth interior option since 1954. It is available at no extra cost.

An Astra-Dome instrument panel includes as many as 17 pushbuttons for control of transmission, heater and radio. It groups all controls, gauges and dials directly in front of the driver where he can easily reach them. The Astra-Dome is lighted by seven wafer-thin panels and eight pointers of a new green-glowing light source known as Panelescent lighting.

Automatic Transmission Standard

For the first time, an improved Torque-Flight automatic transmission is standard equipment on all Chryslers.

All three of Chrysler's V-8 engines have improved silent mountings. Chrysler Windsors are powered by a Golden Lion 383 Engine which has a bore of 4.03 inches, stroke of 3.75 inches, and 383 cubic-inch displacement.

Chrysler Saratoga models are powered by a Golden Lion 383 engine with four-barrel carburetor. Dual exhaust system is optional.

Chrysler New Yorker models are powered by the Golden Lion 413 engine, with a bore of 4.18 inches, a stroke of 3.75 inches, and displacement of 413 inches. A dual exhaust system is standard on the New Yorkers.

Exhaust systems have been rerouted through the propeller shaft tunnel to protect against road damage and to allow the floor to be dropped for space. Mufflers have been located farther to the rear. Exhaust systems are aluminized to double their life.

New High-Tower driver seats extend well above the other seats to cushion the shoulders of the driver and thus reduce fatigue. New Yorker front seat cushions are covered with foam rubber of three-inch thickness. All other Chrysler front seat cushions feature 2½ inches of foam rubber.

Comfort options for 1960 include new fully-automatic, foam-covered swivel seats which swing out simultaneously with the opening of a door to accept driver or passenger. A new fully-automatic Auto-Pilot option requires no resetting after braking. Once the brake pedal is released, Auto-Pilot locks in automatically when the driver accelerates the car to the dialed speed, and is disengaged again by a touch on the brake pedal.

48 Color Combinations

Increased comfort in the 1960 Chrysler results not only from greater leg room but from an increase of one inch in seat height made possible by lowering the floor. Hip room in all two-door hardtop rear seats has been increased by 4½ inches.

All-around visibility is greater with total glass area on some models increased as much as 54.3 per cent. Compound-curved windshields are standard equipment on all models. The New Yorker four-door hardtop rear window for 1960 consists of 1,980 square inches of glass. It is optional on Windsor and Saratoga four-door hardtops.

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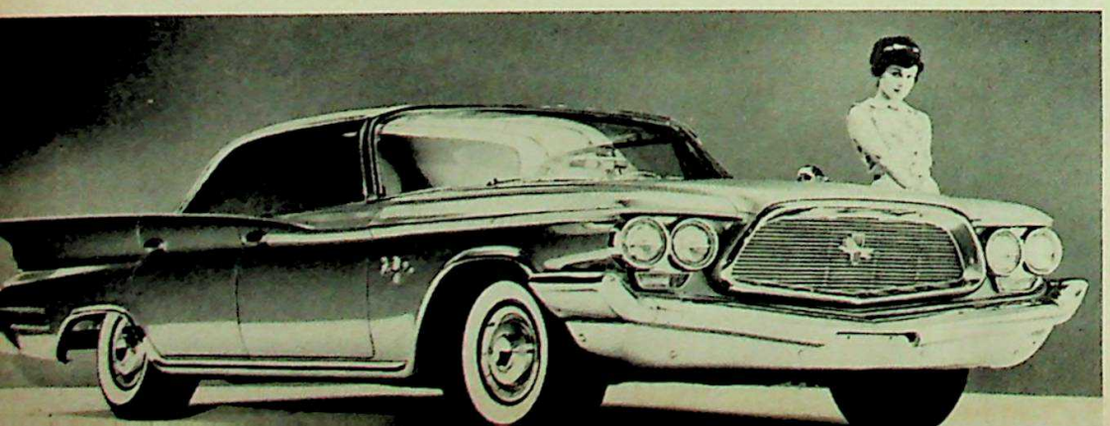


★ ★ ★

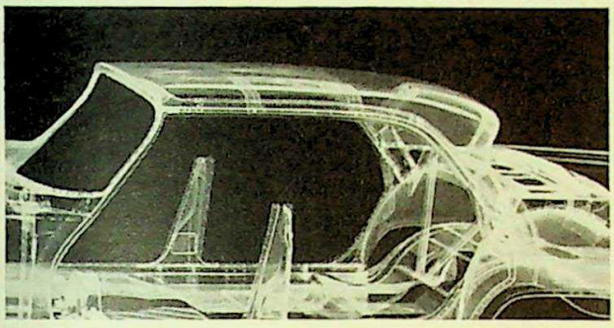
The all-new Chrysler New Yorker four-door hardtop offers more headroom and legroom in 1960. Its advanced styling is in the tradition of the Chrysler 300, with massive air-scoop grille, integrated fins, and a minimum of ornamentation.

★ ★ ★

THE PLYMOUTH 1960

BUILT A NEW SOLID WAY TO GIVE YOU SOLID SATISFACTION

Chrysler engineering brings you a new kind of Plymouth that marks a major breakthrough in car design. This '60 Plymouth is exceptionally strong and roomy. It is sparing of gas. It rides more comfortably, handles better, and is much quieter, we believe, than any other low-price car you have ever known.



Plymouth's new DURA-QUIET UNIBODY *is a rigidly formed structure, locked by about 5400 precise welds. No conventional body bolts, braces, struts or stays to loosen and give trouble. The Plymouth engine is housed in its own separate welded unit, and insulated to keep vibration from reaching the body. Road and wind noises are hushed.*

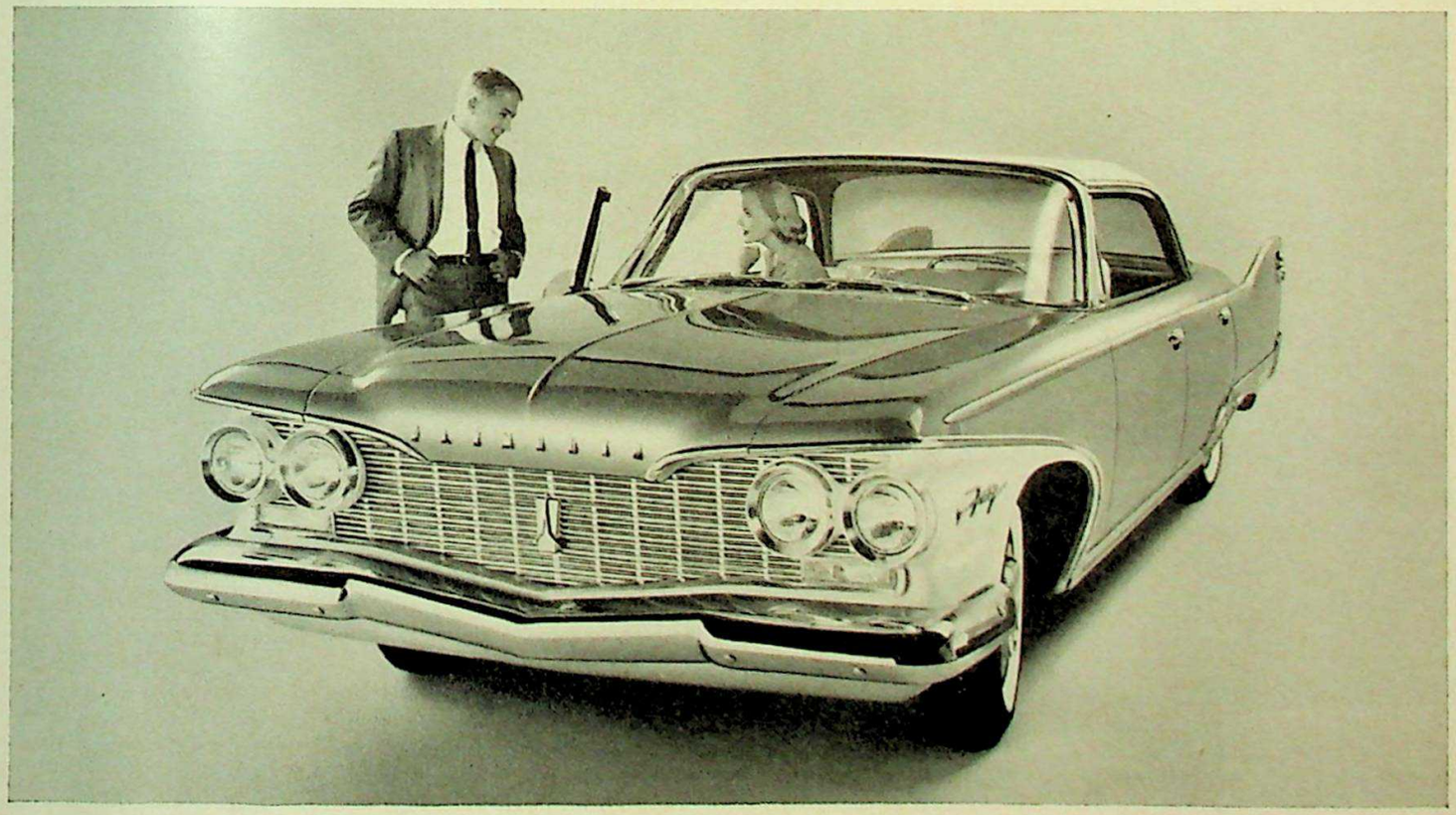
We doubt if any car has ever ridden so well as this low-price automobile. And only a fine sports car can equal the sureness, steadiness and ease of its handling. Stabilizer Design, incorporating rear stabilizer fins, adds stability, cuts wind resistance, contributes to a marked saving on gas. See and drive Plymouth—solid for '60!

Many years in development, the new Solid Plymouth is designed, engineered and built with extreme care and precision. The body and frame unit are welded together as one in a unique, new way. This results in a feeling of solidity and tightness . . . a quality of craftsmanship no other car in its class can equal.

ECONOMICAL NEW INCLINED 30-D ECONOMY SIX heads list of Plymouth engine choices for 1960. Others include extra-cost new SonoRamic Commando V-8 with supercharged effect; Fury V-800 with optional SuperPak; extra-cost Golden Commando 395; and standard Fury V-800, Mobilgas Economy Run champ in its class.

EXTRAS INCLUDE: optional Safe-T-Matic vacuum doorlock system; optional RCA "45" Record Player; standard 6-way Custom-Positioned Front Seat (a power version is optional); plus many more desirable features for 1960.

SOLID PLYMOUTH 1960 *A Chrysler-engineered product*



Corvette's Exterior Styling Unchanged

Marking its eigth year of production, the popular Chevrolet Corvette sports car in 1960 features a number of important engine and chassis revisions. These include improved engine cooling and oil economy plus sizable weight savings with the increased use of aluminum in models equipped with manual transmissions.

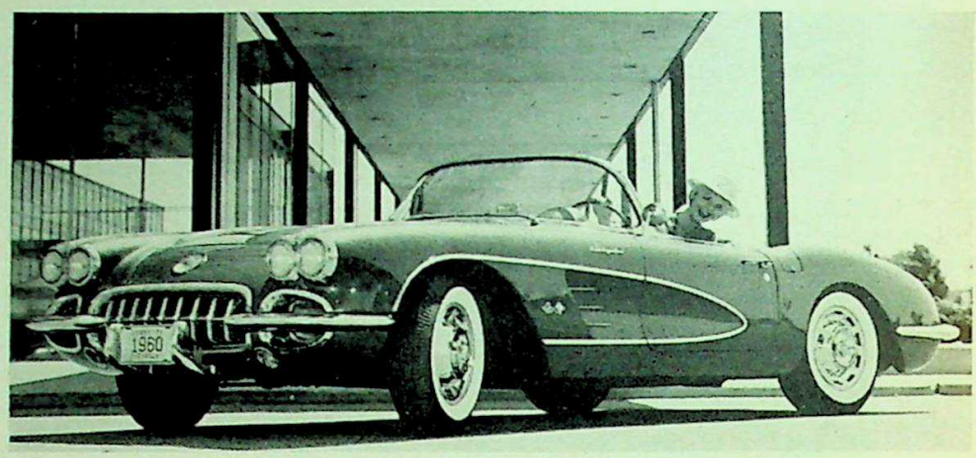
Addition of a rear stabilizer bar and other suspension changes provide the Corvette with a new peak in ride and handling.

For top performance, new items offered as special equipment are a fuel injection engine with aluminum head; heavy-duty brakes with built-in cooling "fans"; and a viscous engine fan drive.

Uses Stabilizer Bars

A weight saving of almost 60 pounds is gained by use of the aluminum heads in the optional fuel injection unit. Aluminum usage is extended to clutch housings in both three and four-speed manual transmissions for an additional savings of 18 pounds without impairing effectiveness of the housing.

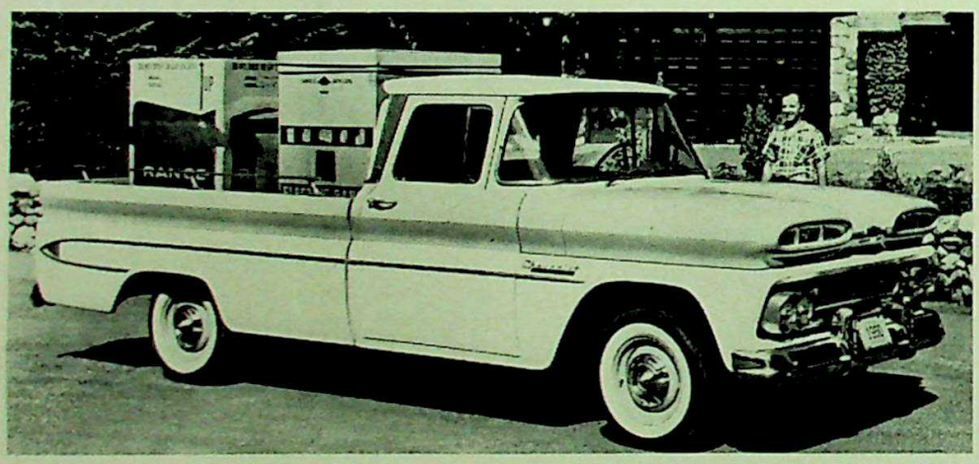
Engine cooling is improved with addition of a spacer that moves the fan almost two inches closer to the radiator to permit use of a shallower radiator fan shroud. To increase cooling capacity of the high performance engines an all-aluminum cross-flow radiator is furnished on Corvettes with special camshaft engine.



The popular Chevrolet Corvette's exterior styling is virtually unchanged in 1960 except for new colors and aluminum trim panels for the side walls.

Vehicle stability of the Corvette is increased by the addition of a stabilizer bar immediately rear of the rear axle, which makes unnecessary the use of heavy-duty springs and shock absorbers. A new front stabilizer bar is larger in diameter and of straighter design than the previous one, offering greater resistance to torsional stress.

Softer Ride For 1960 Chevrolet Trucks



Ride, handling and durability of this 1960 Chevrolet light-duty truck have been improved by revolutionary independent front wheel suspension with torsion bar springs and ball joints. (More complete details of the 1960 Chevrolet truck line were carried in October.)

The 1960 Chevrolet low-cab-forward heavy duty tractor. Two-stage, variable-rate, leaf type rear springs provide more uniform spring rate, softer unloaded ride, greater stability and increased durability. Functional air inlets provide better underhood ventilation.

Bovee Elected DPMA President

The Detroit Personnel Management Association has announced the following newly elected officers for 1959-60: President, Howard Bovee, of Kelsey Hayes Co.; vice-president, David Moon, of Great Lakes Steel Corp.; treasurer, Jack Matheus, of Parke, Davis & Co.; and secretary, Kenneth B. Porter, of Employers Association of Detroit.

Wayne Osborn, of Michigan Bell Telephone Co., has been elected to the board of directors. Re-elected as directors are: William Bechill, of Chrysler Corp.; Norman Ziegler, of Woodall Industries, Inc.; Mrs Teena Williams, of Kasle Steel Corp.; and Dexter Ware, of J. L. Hudson Co.

STOCK SPLIT APPROVED

Stockholders of Federal-Mogul-Bower Bearings, Inc., Detroit, have voted to increase authorized common stock from 3,000,000 to 6,000,000 shares, thereby paving the way for a 2-to-1 stock split. The new stock will be distributed Nov. 13 to shareholders of record on Oct. 23. Directors previously had announced their intention to pay a quarterly dividend rate of 35 cents a share on the doubled stock.

CELEBRATES 25th ANNIVERSARY

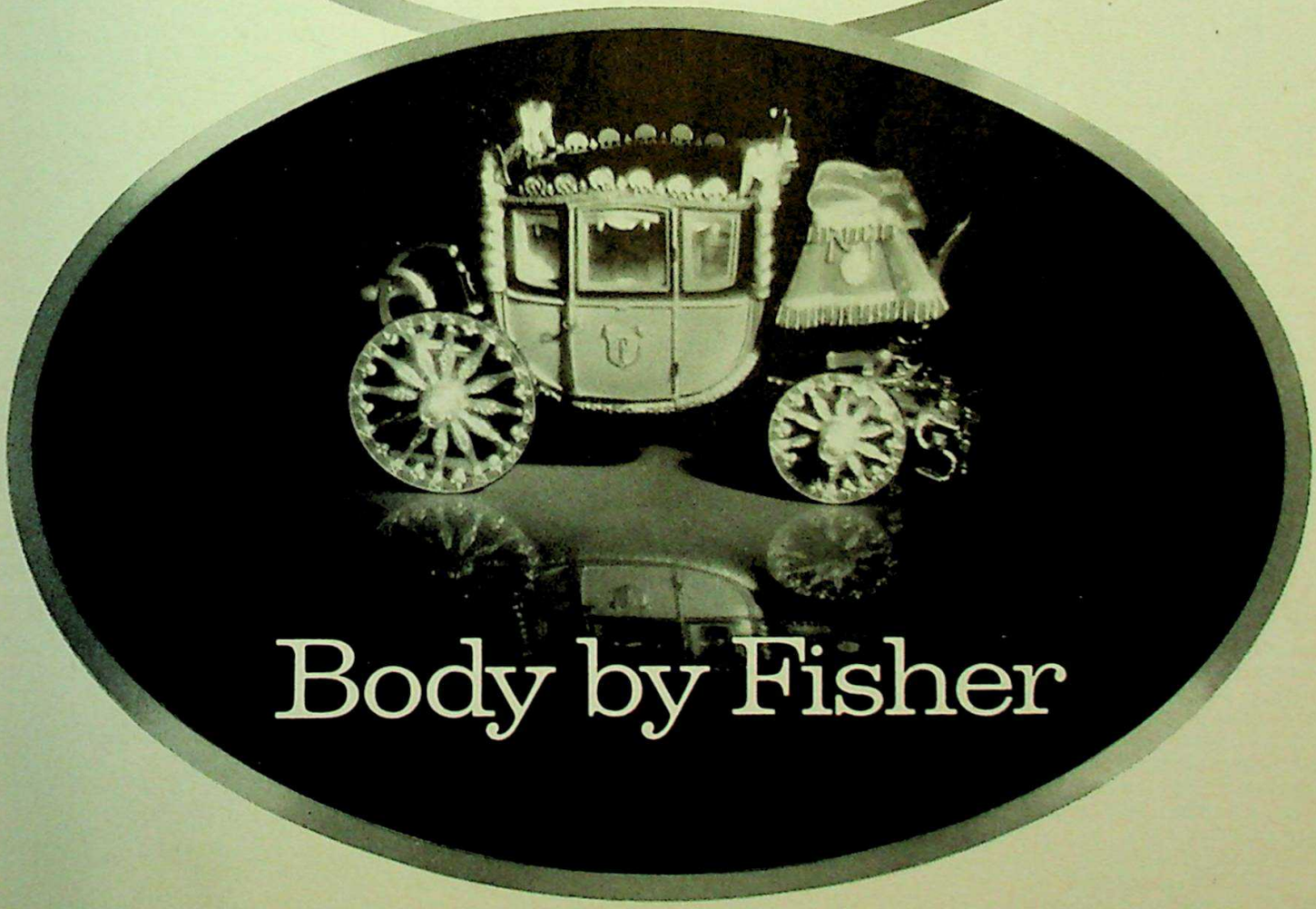
The First National Bank of Manistique, headed by Fred H. Hahne, president, celebrated its 25th anniversary in October.

GETS MAHON ACCOUNT

Walter F. Sheetz, president of The R. C. Mahon Company, Detroit, has announced the appointment of Dudgeon, Taylor & Bruske, Inc., to handle the firm's national advertising and sales promotion.

The Exclusive Extra

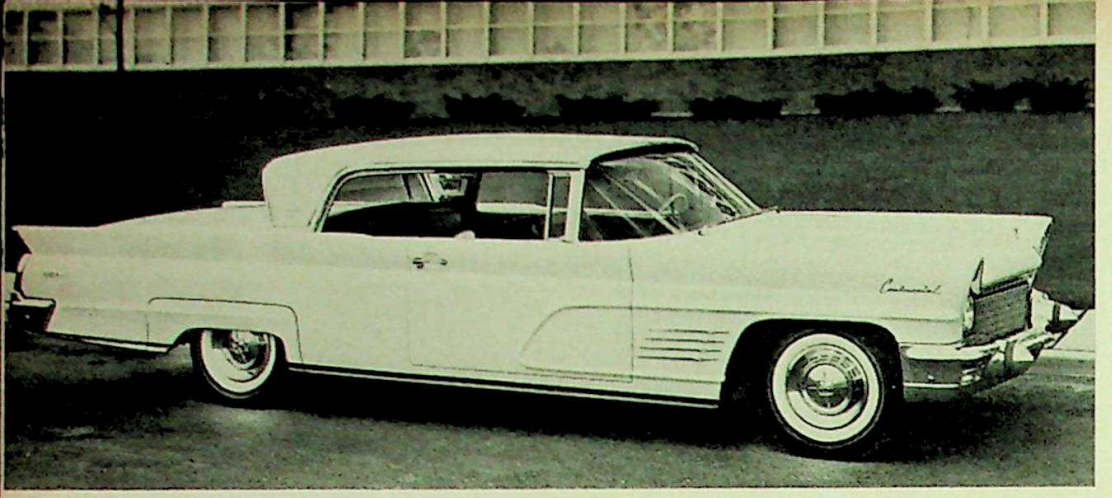
IN ALL GENERAL MOTORS CARS



Body by Fisher

The built-in quality of Body by Fisher is your extra value in

CHEVROLET · PONTIAC · OLDSMOBILE · BUICK · CADILLAC



★ ★ ★

The clean, classic lines of the 1960 Lincoln Continental have been enhanced by the newly styled grilles and bumpers fore and aft, a foreshortened roof for greater traffic light visibility, and tasteful chrome accents in the sculptured area of the front fender.

Distinctive and luxurious interiors provide comfort and quietness for driver and passengers.

A new Hotchkiss rear suspension with leaf springs provides a more luxurious ride and smoother handling ease in all models.

★ ★ ★

Three Series In 1960 Lincoln Line

Styling and engineering refinements aimed at driver enjoyment and passenger comfort are the features of the three series of Lincoln cars for 1960—the Lincoln, the Lincoln Premiere and the Lincoln Continental.

New model offerings are: the Lincoln Continental Limousine, Town Car, four-door sedan, two-door hardtop and convertible; the Lincoln Premiere four-door hardtop, four-door sedan and two-door hardtop; and the Lincoln four-door sedan, four-door hardtop and two-door hardtop.

Redesigned Roof

An elegant profile for the Lincoln and Premiere series is the result of a completely new roof with a town car look; a redesigned instrument panel augments the new interior look; a new Hotchkiss rear suspension with leaf springs provides a smoother ride and greater handling ease; and a newly designed carburetor contributes to improved performance and smoother idling.

The new roof design has resulted in a differently shaped rear window with a very fast slope and an additional 177 square inches of glass area for improved rearward visibility. Highlighting the roof is a wide chrome molding around the edges that merges with a similar molding around the rear window.

Greater overhead traffic light visibility through the front window in the Lincoln Continental has been attained by shortening the front portion of the roof two inches.

Modified Grille Treatment

Fore and aft, the grille treatment on all cars has been modified. Small squares with chrome center pieces identify the Lincoln Continental, and long, raised aluminum rectangles mark the Lincoln. Newly styled front bumpers with rounded guards set in rubber discs located on each side protect the grille and license plate. Directional signals and parking lamps are placed on the outboard of the bumper. Three raised ribs have been formed in the hood to give it a sculptured look.

A newly designed tail light assembly on all Lincolns contains parking, back-up and turning lights set in a single bar on each side of the back panel. Lincoln Continental has three groups of lights on the rear panel set in individual round chrome bezels at the right and left of the panel. Slightly angled rear fins on all models have a chrome molding that extends into the lower back panel forming a continuous line with the rear bumper.

Additional appearance changes include a slim tapered chrome molding along the side of all Lincolns, four horizontal chrome ribs in the front fender panels of the Lincoln Continental, as well as distinctive wheel covers for the Lincoln and Lincoln Continental.

Five million dollars for precision on engineering changes was invested to improve the mechanical reliability of the 1960 Lincoln engine and chassis. Smoother and more efficient operation from the huge 430 cubic-inch displacement engine is the result of a newly designed carburetor which provides smoother idling, improved economy and a better air-fuel mixture. Horsepower has been reduced in 1960 to 315 at 4100 r. p. m. from 350 at 4400 r. p. m. in 1959. Bore, stroke and compression ratio remain the same.

Easier Electrical Maintenance

A hot idle compensating device on the carburetor consists of a bi-metal thermostat that expands and allows more air to enter the manifold under high temperature conditions. This virtually eliminates rough engine idling in hot weather.

Easier electrical maintenance is made possible by the use of a central power control box similar to a household fuse box which groups together all major fuses and circuit breakers.

A specially designed rear engine support has five butyl rubber cushions located on an added cross member that reduces engine vibrations at all engine speeds and the transmission of axle noises to the passenger compartment. The leaf springs have thick rubber insulating pads at the U-bolt attachment to the axle.

Lincoln also features a 12,000-mile throw-away fuel filter which has a life three times greater than in 1959.

Greater muffler and exhaust pipe life and quieter operation have been developed by laminated, double-walled exhaust pipes and more fully aluminized mufflers.

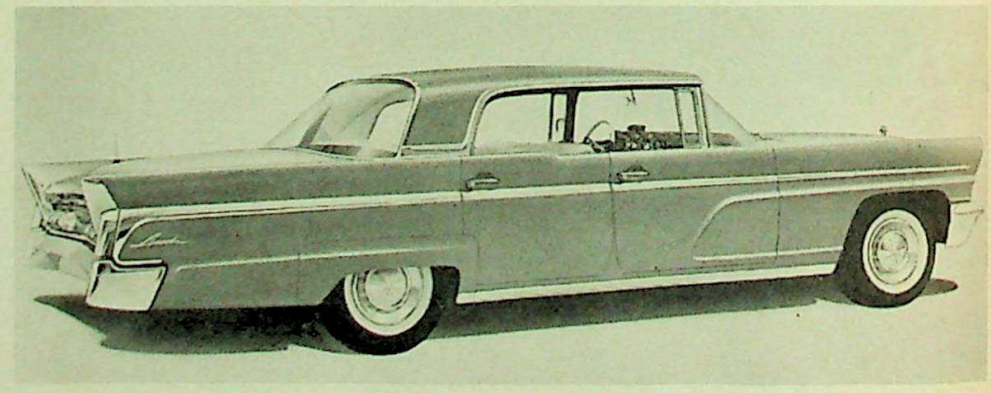
Self-adjusting power brakes have 60 per cent more brake lining life because of new lining materials and thicker linings. Shock absorbers also have a larger diameter.

Overall Length Same

Another brake feature is the push button parking brake release located on the instrument panel. An added safety feature of the vacuum operated release is that it prevents children from releasing the brake in a parked car with the engine off.

Wheelbase, overall length, height, and width of the new Lincolns are virtually unchanged from 1959.

Standard equipment on all models includes a heater, radio, white wall tires, automatic transmission, power steering, power brakes, windshield washer, back-up lights and courtesy lights, electric clock, padded instrument panel and sun visors, remote control outside rear mirror, foam rubber cushions, turn signals, push button release parking brake, and undercoating.



A striking profile for the 1960 Lincoln is the result of a completely redesigned roof. The differently shaped rear window has 177 additional square inches of glass area. Shown here is the Lincoln four-door landau.

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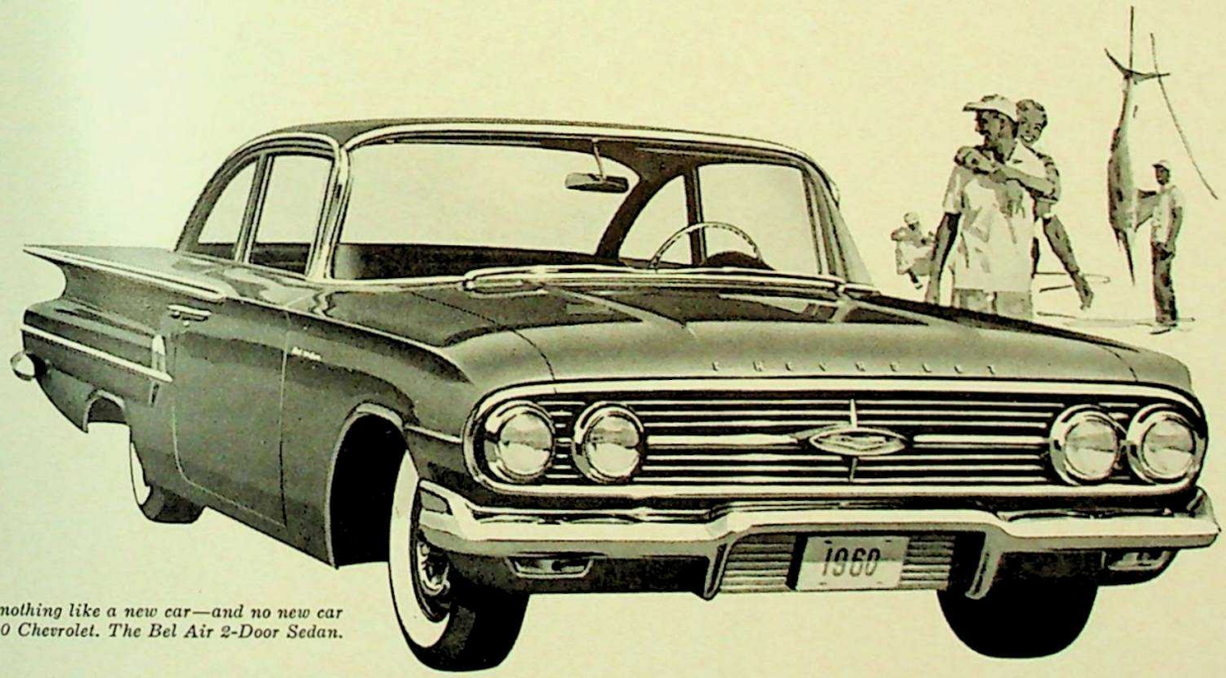
so much that's

new

so much
that's

different!

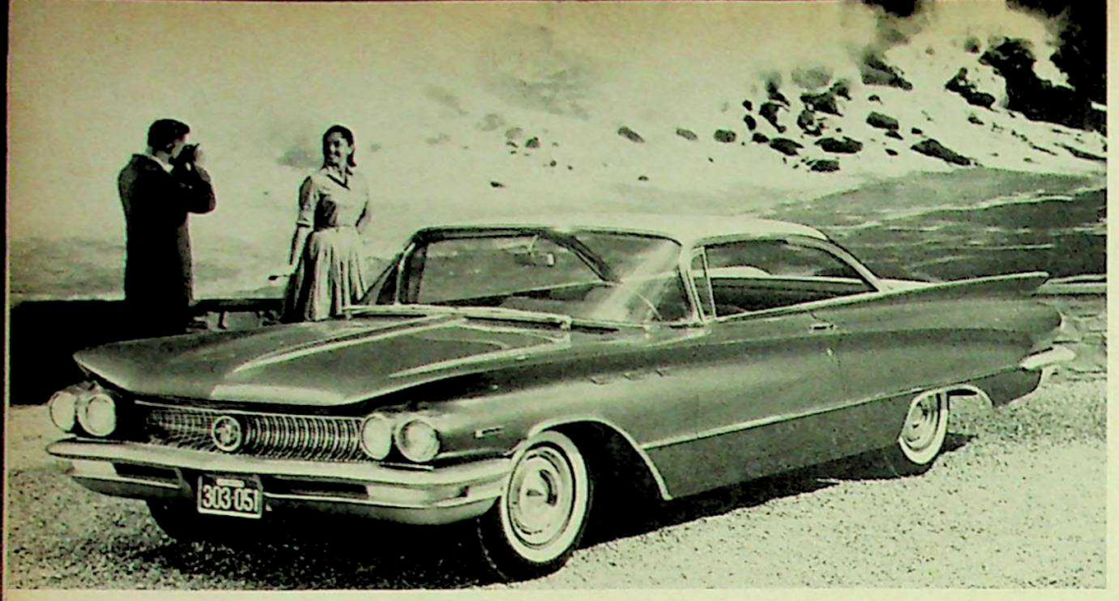
THE SUPERLATIVE 1960 CHEVROLET



There's nothing like a new car—and no new car like a '60 Chevrolet. The Bel Air 2-Door Sedan.

Every tasteful line of this superlative '60 Chevrolet seems to tell the luxury cars to move over—from the proud jut of its prow to the saucy cut of its rear deck. ■ And the hushed elegance of its roomier new Body by Fisher repeats the refrain—with finely tailored fabrics, sofa-wide seats and a lower-than-ever transmission tunnel that'll please you right down to your toes. You'll luxuriate, too, in the way this new Chevy's Full Coil ride—insulated from road shock and noise by thicker, newly designed body mounts—rivals the poise of even the costliest cars. ■ Yet, sumptuous as this '60 Chevy is, it remains more dedicated than ever to those proved Chevrolet virtues—economy and dependability. There's a choice of two standard engines that do marvelous things with mileage—the famed Hi-Thrift 6, savin'est 6 in any full-size car, and a new Turbo-Fire V8 that gets more miles on a gallon of regular while giving you more "git" at normal speeds. Your dealer's the man to see for the details, including the one we know will delight you most of all—the low price you pay for this superlative Chevrolet luxury! Chevrolet Division of General Motors, Detroit 2, Mich. ■ **nearest to perfection a low-priced car ever came!**

CHEVROLET



★ ★ ★

The new sculptured styling of the 1960 Buick is complemented by the tasteful use of chrome trim, new front end design and massive new bumpers. Two headlights are set in a simulated jet pod that extends back to the middle of the front door panel. The model shown here is the two-door Invicta.

★ ★ ★

Buick Features Sculptured Styling

All new sculptured styling, increased roominess and improved roadability and performance are the features of the 1960 line of Buick cars which were introduced early in October.

Edward D. Rollert, Buick general manager and GM vice-president, said: "Quality in manufacture, plus our sculptured styling and fresh new features make these the most outstanding cars we have ever produced."

19 Models In Three Series

Passenger car comfort in all 19 models has been improved by lowering the transmission hump and floor in front and raising the seats to chair-height levels.

Redesigned shock absorbers incorporated with toughened stabilizer and rear track bars further enhance the traditionally easy riding and handling qualities of the cars.

The 1960 Buick is available in three series: LeSabre, lowest priced in the line; Invicta, most spirited model; and Electra, the luxury series. They are identified by their ventiports, four on each front fender of the Electra series, and three on the Invicta and LeSabre.

New features include a single transverse muffler which serves both dual and single exhaust systems, an adjustable instrument panel that can be tilted to any position for easier reading; and independent heater controls for both front and rear seats.

A massive front end design, with twin headlights horizontally abreast at the ends of the new concave grille, complements the sculptured body styling. The twin headlights are set outboard of the grille in simulated jet-pod housings.

Buick's traditional solid classic design is emphasized in 1960 through full-length sculptured styling. Fashioned without chrome moldings, the deep sculpturing creates an entirely new appearance. Rear fenders have been rounded, and now blend into a deep rear bumper.

Economical operation has been given special attention in engine design. LeSabre's 364-cubic inch engine is available in regular gasoline or premium gasoline options. The regular gasoline engine, a no-cost option, uses a two-barrel carburetor with a 9-to-1 compression ratio.

Electra and Invicta models are powered by the improved 401-cubic inch Wildcat V-8 engine, with four-barrel carburetor and 10.25-to-1 compression ratio.

Buick's ultra-smooth turbine drive transmission is available on all models, as standard equipment on the Electra and Invicta and optional on LeSabre.

Lower Transmission Hump

All models are roomier as a result of engineering refinements which have produced lower front floors for more leg room and to allow chair-height seats. Lowering of the transmission hump in both front and rear passenger areas, and wider-opening rear doors, assure easier entrance and exit.

The unique transverse muffler system provides complete exhaust quietness by minimizing exhaust gas flow resistance. The single muffler, placed crosswise of the frame, serves both dual and single exhaust systems, and prolongs muffler life by eliminating the "cold" side and preventing the condensation of harmful acidic vapor.

Buick's finned aluminum front and cast iron rear brake drums have been given additional cooling action. Wheel covers and wheels have been slotted to accelerate the volume of airflow over the drums, thus adding considerably to heat dissipation capacity and consequently increasing the braking power.

Winter passenger comfort is assured by the new Buick heater. Independent controls regulate heat to both passenger compartments proportionately so that temperatures in the rear are the same as in the front.

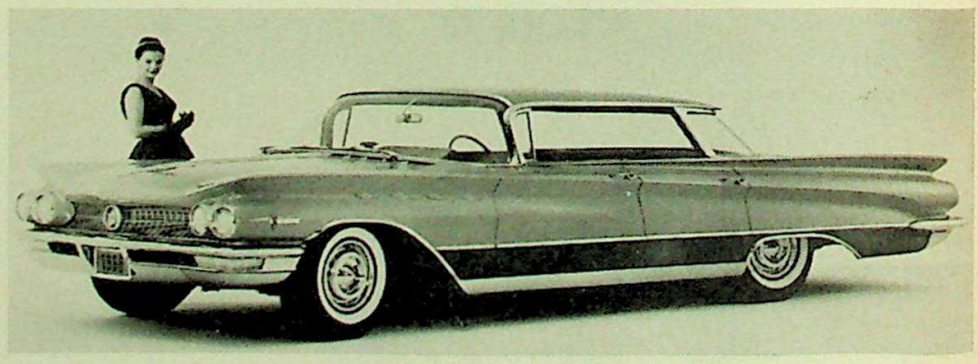
Mirromagic Instrument Panel

Individually adjustable supplies of cool air, through the use of five air outlets, are a feature of the new air conditioner. Three of the outlets are controllable for air direction.

New in the industry is Buick's mirromagic instrument panel which provides the driver with glare-proof gauge and speedometer readings, adjustable to any desired position. It is done with a mirror, which can be tilted conveniently to any angle.

Also exclusive with Buick is the twilight sentinel, a safety feature providing automatic headlight operation. The device turns on the headlamps when daylight fades, extinguishes them when daylight increases.

Buick interiors offer 74 choices of decorator-coordinated trims in long-wearing nylon, broadcloth, cordaveen and leather. Full carpeted floors and cushioned instrument panels are standard equipment on all models.



The graceful sweep of Buick's sculptured styling is epitomized in the Electra 225 four-door hardtop, the most luxurious model in the Buick line. Its styling is enhanced by a brushed aluminum panel that extends along the bottom of the car from the front wheel housing to the rear bumper. All Electra series models carry four ventiports on the front fenders.

LINCOLN FIRM MOVES

Lincoln Die Casting, Inc., has announced its move to new and larger quarters at 15085 East 11-Mile road, Roseville.

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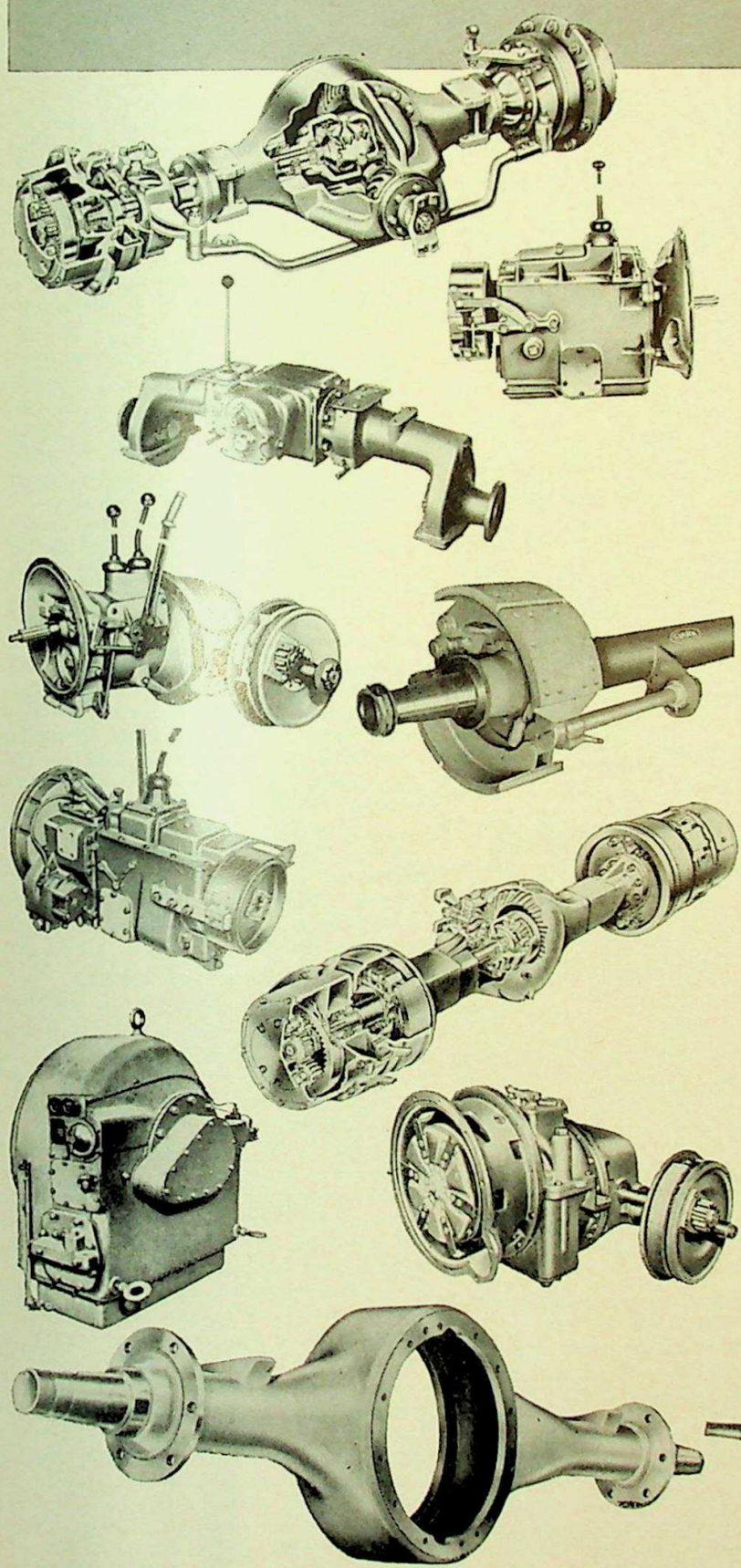

There's no finer assurance of a long and profitable life for a revenue vehicle than Clark units delivering horsepower from fly-wheel to tires. That basic usefulness extends with equal effectiveness to stationary power plants.

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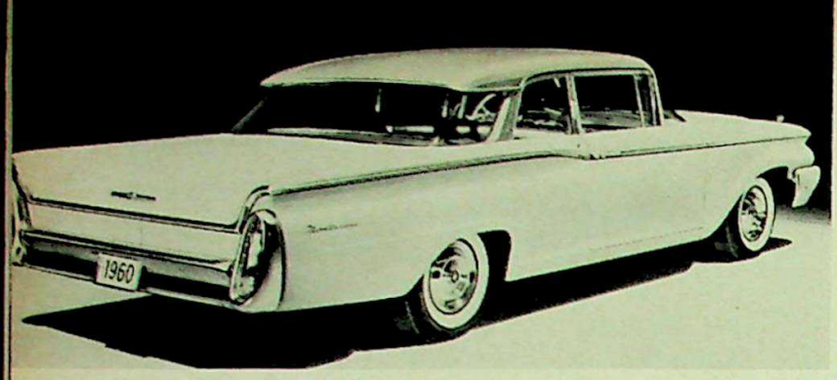
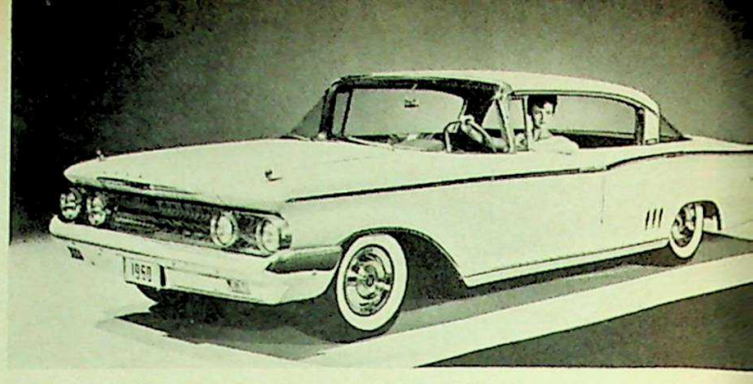


The functionally clean design and distinctive styling of the 1960 Mercury are seen in this Monterey two-door sedan. Both the 312 cubic-inch engine and the 383 cubic-inch engine available in the Monterey series offer added economy by using regular gasoline.



Pictured here is the Mercury Montclair four-door cruiser (hardtop), one of 13 models in four series for 1960, all on a 126-inch wheelbase. Spacious interiors with lowered transmission and driveshaft tunnel afford full comfort for six passengers.

Mercury Offers New Standard Of Riding

Body, frame suspension, engine and transmission are precisely blended to provide a new standard in riding comfort in the 13 new models offered by Mercury for 1960.

Many important design changes were made in Mercury's three V-8 engines to improve both economy and performance and give greater reliability and smoother, quieter operation. All engines have two-barrel carburetors which save fuel, and two of the engines are designed for maximum performance with regular gasoline.

Wheelbase Of 126 Inches

All models of the 1960 Mercury have a wheelbase of 126 inches, permitting a greater length between wheels, with a resultant improvement in occupant comfort. Overall length is 219.2 inches. Continuing a feature introduced to the industry by Mercury last year, the 1960 models have a low transmission and driveshaft tunnel.

"Mercury engineers have succeeded in completely insulating the body of the car from the running gear, resulting in an exceptionally smooth ride," says Ben D. Mills, vice-president of Ford Motor Company and general manager of the M-E-L Division. "Drivers and passengers are protected from noise, vibration and harshness by rubber, butyl and other effective insulating materials at every point where the body is attached to the frame or to other chassis components."

Mercury's exterior styling is completely new and is characterized by softer lines in its hood, fenders, quarter panels, rear deck and doors. The broad front bumper serves as a foundation for the air-gathering grille with bright concave vertical bars. The body side moulding includes the door handle as a contained part. At the rear, the lines of the deck fall off fast to meet the downward sweep of the upper surface of the quarter panel. The low taillights are canted slightly outboard.

Three Engines Available

The upper body features a big, full-vision windshield, Hardtop "cruiser" models have a sloping roof, and sedan models have a flat, crisp roof with rear overhang.

In Mercury's 312 cubic-inch engine, a re-shaped combustion chamber was engineered to improve efficiency. This engine has a compression ratio of 8.9 to 1, a rated horsepower of 205 at 4000 r. p. m. and a torque of 328 at 2100 r. p. m.

The Mercury Marauder 383 cubic-inch engine has an 8.5 to 1 compression ratio, 280 horsepower at 4200 and torque of 405 at 2200 r. p. m. These two engines give additional economy by operating on regular grade gasoline.

Frame Eliminates Rattles

The Mercury Marauder 430 cubic-inch engine has a unique new thermostatically controlled air compensator valve which smoothes engine idle, avoids stalling and reduces the possibility of vapor lock. Its compression ratio is 10 to 1, horsepower is 310 at 4100 r. p. m., and torque is 460 at 2200 r. p. m.

All Mercury engines have a new 12,000-mile disposable fuel filter which is 20 times as efficient as ordinary types.

The basic design of the Mercury frame eliminates all possible body squeaks and rattles. With a box side rail construction and five cross-members, the frame is the strongest in its field. It is designed to be rigid in torsion but flexible in bending for superior resistance to shake and harshness.

Large Rubber Bushings

Among the major changes in the chassis and in the suspension system are the installation of large rubber bushings in both front and rear suspension and the use of more butyl rubber to absorb road shock.

To increase passenger compartment quietness, the electric motor for the windshield wiper and the larger Mercury heater blower motor are located outside the dashboard in the engine compartment.

The electrical system for 1960 includes printed electrical circuits for the instrument panel lights and gages which eliminate many wires and simplify service operations. Nylon snap-on straps replace steel clips holding the electrical wire harness in the engine compartment, thus preventing short circuits.

Tandem-action windshield wipers include a three-speed electrical wiper control. The new heater has a 14 per cent greater capacity, which also boosts defroster efficiency by 40 per cent.

15 Exterior Colors

New fabrics—all with 100 per cent nylon face—are offered in interior trim schemes. Metallic vinyls complement the body cloth. Fifteen exterior colors and 36 two-tones are offered in super enamels.

Mercury's 13 models for 1960 are topped by the Park Lane series in a two-door cruiser (hardtop), a four-door cruiser (hardtop), and a two-door convertible. The Montclair series consists of a four-door sedan, a two-door cruiser and a four-door cruiser. The five Monterey models are a two-door and four-door sedan, a two-door and four-door cruiser, and a convertible.

Two Country Cruiser four-door station wagons with hardtop styling are offered, both six-passenger models with optional self-storing third seat, and a rear window which slides into the tailgate. They are the Colony Park with simulated wood paneling, and the Commuter.

Leonard Refineries Merge With Sohio

Stockholders of Leonard Refineries, Inc., Alma, will meet on Dec. 10 to vote on a proposal to sell the company to Standard Oil Co. of Ohio through an exchange of stock involving about $17,000,000. Boards of both companies have agreed to the merger, according to Reid Brazell, Leonard president.

Under the agreement, Leonard shareholders would get 324,582 shares of Standard of Ohio stock, or one share of Standard of Ohio for 3.45 shares of Leonard. Leonard has 1,119,810 shares outstanding. Brazell said Leonard would become a wholly-owned subsidiary of Standard of Ohio but would keep its management, personnel and its own marketing name.

Leonard sells gasoline under its own name in Michigan. In the year ended March 31, 1959, the company reported sales of $54,200,000, and in the subsequent June quarter its sales totaled $12,680,000.

Leonard is the second largest independent refiner and marketer in Michigan. Its assets in oil wells, refineries, distributing facilities and equipment in the state exceed $30,000,000.

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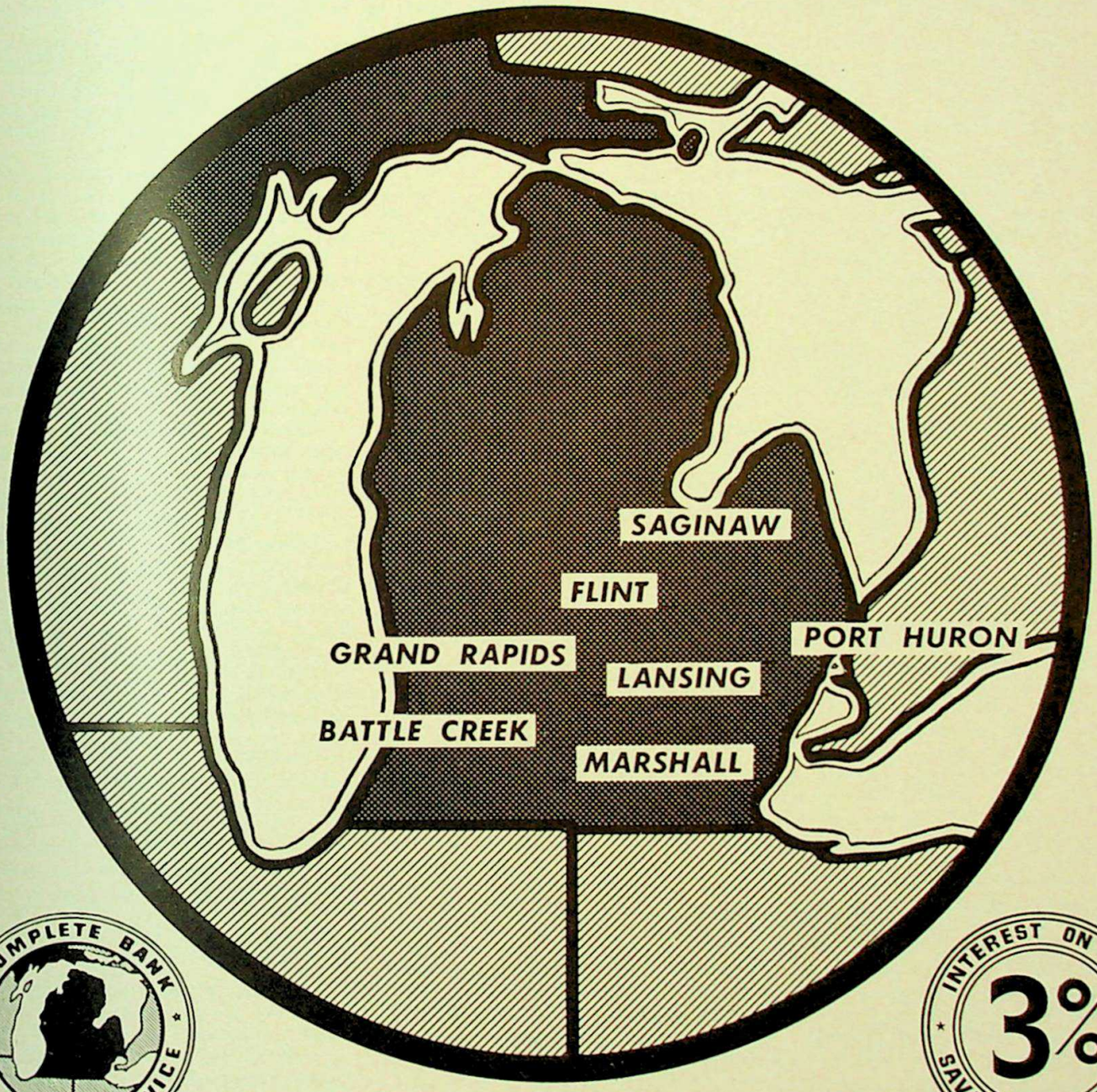

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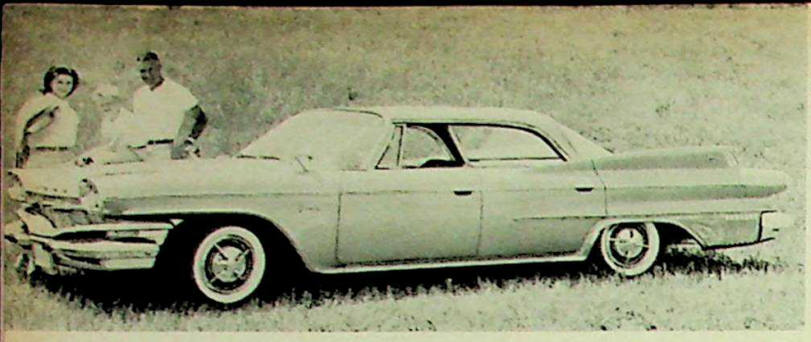
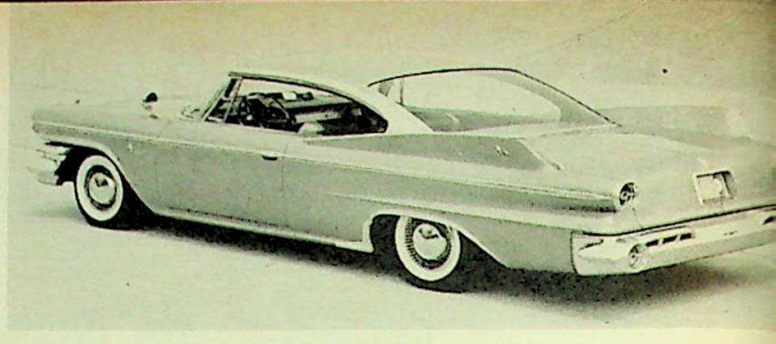


New styling and advanced engineering feature the new 1960 Dodge 122-inch wheelbase models. This Polara four-door hardtop is one of eleven models offering natural height seats and a new level of comfort and quiet.



The low, graceful silhouette of the 1960 Dodge is accented by small canted fins flaring naturally from the new jet-tube rear fenders. This Matador features a high-fashion rear window which curves into the roof.

Eleven Models In New Dodge Series

Two all-new lines of roomy, comfortable cars with outstanding roadability and ease of handling, designated as the Matador and the Polara, were introduced by Dodge early in October.

"These low-medium priced cars are offered in 11 sedan, hardtop, station wagon and convertible models featuring a combination of the most important engineering and styling changes that Dodge has ever made in a single year model year," said M. C. Patterson, Dodge Division general manager.

Hails Unibody Construction

He hailed the new Unibody construction as the "greatest step forward in automobile body building" since Dodge introduced all steel bodies.

The body and the frame are integrated into a single unified structure by this new method, giving Dodge more room on the inside—including more leg room, more head room and higher seats—and greater structural strength which provides an "island" of comfort and quiet for the driver and passengers. Coupled with Torsion-Aire Ride, the new cars achieve a higher level of roadability and handling ease.

These engineering changes permitted stylists to create a new exterior silhouette, and at the same time provide larger and higher door openings to permit easier entrance and exit.

The sweeping exterior silhouette is accented by small canted fins flaring from new jet-tube rear fenders, which are climaxed by large, single tail lights.

Style features of the front are the flaring bumper with recessed wrap-around parking lights, and a new horizontal grille.

Three Engine Choices

A lighter, thinner roof line made possible by more liberal use of glass is suggestive of convertible models. A special feature in the hardtop models is a large skyview rear window—standard on the Polara and optional on the Matador—available in shaded glass that cuts out 85 per cent of the sun's heat.

In the Matador series, Dodge offers a 2-door hardtop, 4-door sedan, 4-door hardtop, 6-pasenger station wagon and 9-passenger station wagon. In the Polara series are the same lineup of models plus a convertible. All have a wheelbase of 122 inches.

Three V-8 engines are offered to power the 1960 Dodge cars. Standard in the Matador series is the 361 cubic-inch Super Red Ram V-8 engine, equipped with a two-barrel carburetor, and rated at 295 horsepower with a compression ratio of 10 to 1. The Polara models feature a 383 cubic-inch Ram Fire V-8, with four-barrel carburetor, which develops 325 horsepower with a compression ratio of 10 to 1.

In addition to these two engines, Dodge also is making available the new "D-500" Ram Induction engine, with a displacement of 383 cubic inches, 330 horsepower, and compression ratio of 10 to 1. Ram induction literally forces air and fuel into the engine when the throttle is opened, but does not take any power from the engine for its operation. It has no moving parts to get out of adjustment. It provides as much as ten per cent more power output at the rear wheels than does a standard Polara engine.

New Rustproofing Process

New rubber block and heavy coil spring engine mountings achieve the largest reduction of engine vibration since Dodge began using V-8s.

A new rustproofing and anti-corrosion process has been adopted for 1960. Heavier metal is used in the sills and underbody, and 20 separate operations are involved in the body protection and finishing process." They include seven different dipping steps, seven external sprays and six coats of sealers, primers and "Lustre-Bond" super enamels.

Dodge has introduced two new station wagon body styles for 1960. The Polara station wagon features hardtop styling, with an uninterrupted viewing expanse from windshield to rear door pillar. The Matador features the same roof styling, and has a full center door pillar.

Available in 6-passenger and 9-passenger models, the station wagons provide such features as: A chrome contour luggage rack, dealer installed, which holds up to 25 square feet of roof-top cargo; a power-operated rear window, with control switches on the instrument panel and above the window; positive latches on the second seat; and a safety latch which permits the tailgate to be opened when the tailgate window is rolled down and a double latch released.

15 Exterior Colors

Among the new safety and convenience features on the 1960 Dodges are: Optional automatic swivel seats; two-position door checks; optional "Child-Guard" vacuum-powered door locks operated from the instrument panel; improved total-contact brakes; transistorized radios that include a rear seat speaker in all sedans and hardtops; full width sun visors; a four-light warning flasher system; and an all-aluminized exhaust system that offers up to double the life of exhaust components.

Interior fabrics are easy to clean and are color-keyed to the exteriors. An option on the Matador hardtops and station wagons and on all Polara models is an all-vinyl interior trim.

Fifteen exterior colors are offered in "Lustre-Bond" enamel.

Continental Acquires Novi Engine Co.

Continental Motors Corporation has purchased the real estate and plant of the Novi Equipment Company, Novi, together with the machinery and materials inventory of Novi's governor division. The plant now is operating as the Novi Division of Continental Motors, producing governors for a substantial part of Continental's industrial engine output.

The purchase involved a modern, 80,000 square-foot plant located on an 80-acre tract on Novi road adjoining the Chesapeake & Ohio Railway's right of way. The change was accomplished without interruption in production.

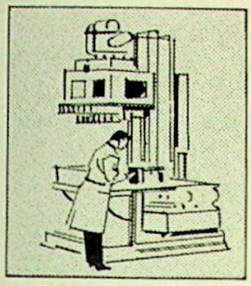
The product of Continental's new Novi Division is used on most of the Red Seal industrial engines requiring normal industrial speed regulation. It differs from centrifugal governors in that round steel balls, instead of cylindrical flyweights, are used as motivating force producers.

OPENS CONSULTING SERVICE

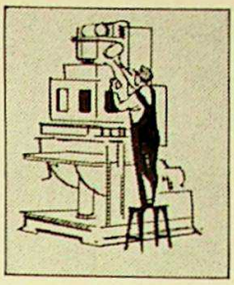
Opening of a consulting service devoted exclusively to executive search and recruiting, known as Thomas J. Burke Personnel Consultants, has been announced by Thomas J. Burke. Offices are located in the Executive Building at 14631 West McNichols road, Detroit 35. Burke formerly maintained a personnel placement service in the Guardian Building for executive, administrative and engineering talent.

NBD VOTES DIVIDEND

National Bank of Detroit has declared a quarterly dividend of 50 cents a share on the common stock, payable Nov. 10 to shareholders of record on Oct. 23.

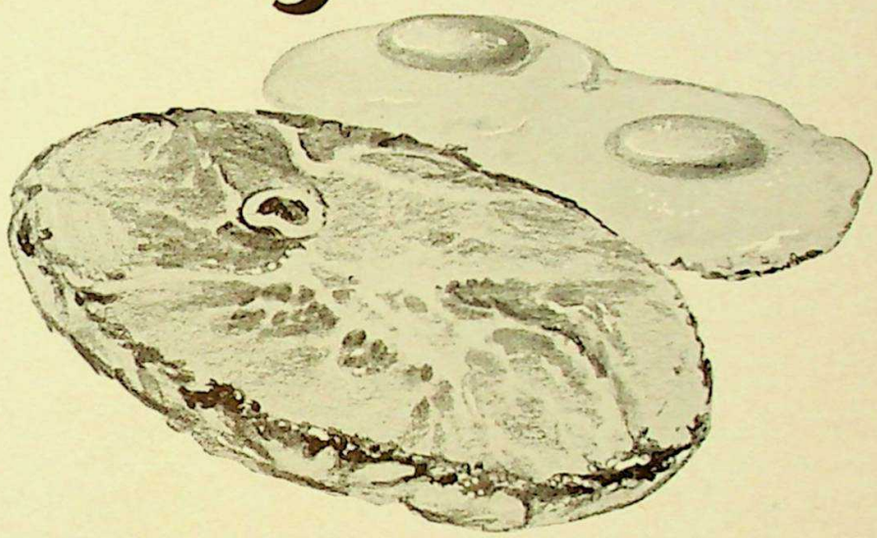


consistent, high, profitable production



low maintenance costs and minimum down-time

they go together like



Some things just go together naturally like higher productivity and lower maintenance costs. The combination produces a more profitable operation. But maintenance costs are not controlled if a machine has to be shut down frequently for "patchwork" repairs.

A new machine tool with its new bearings runs like a top with low break-away friction, low power requirements and tolerances held. As the bearings wear, these qualities diminish. So much depends on our production machines today that the bearings should not be replaced piecemeal—we call that "patchwork." Put in a complete new set of the right bearings at all the critical points of application and you will have a new machine again.

We probably have the correct bearings right in our local stock for your machine tools. Tell us the make of the machine, serial number or model, and we can, nine times out of ten, supply you immediately with the bearings specified by the machine tool manufacturer.

Enjoy the extra dividends that come with use of the correct bearings and a complete service job.

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Sliding Roof Offered On Thunderbird

Offering a completely automatic soft top convertible and an optional sliding sun roof with the hardtop model, the 1960 Thunderbird retains the famous profile that has made it one of America's fine car favorites. In addition to these two major pleasure and convenience innovations, distinctive front and rear changes also have been made.

For those who prefer Thunderbird's hardtop styling yet enjoy the open air feeling, a new sliding roof panel is an optional feature with the two-door hardtop model.

Automatic Soft Top

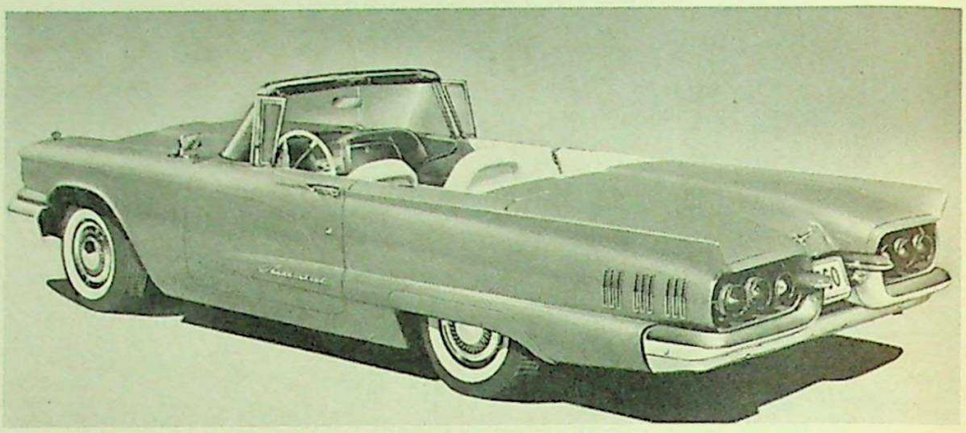
With the 1960 model, the Thunderbird convertible introduces added convenience with a completely automatic top that is stowed beneath the flat rear deck. Without infringing on the rear seat passenger space, the Thunderbird soft top folds neatly into the trunk compartment, requiring no snap-on "boot" and showing no trace of the folded top.

While offering the same exciting silhouette that has made it so distinctive, the Thunderbird for 1960 has a new front-end treatment featuring a redesigned grille. Inside the massive one-piece bumper, one horizontal and three vertical ribs accent the heavy aluminum screen that spans the front of the car for better cooling.

At the rear, each of the two pods contain a new arrangement of three taillights. The two outboard lights on each side serve as taillights and brake lights, while the inboard lights house the back-up lights.

Among the external appointments, the Thunderbird emblem has been restyled; front fender ornaments have been streamlined, and the rear fenders ornamented with vertical strips.

The 1960 Thunderbird is available in 19 exterior colors, plus two-tone combinations. More than half of the new colors are metallic hues. Convertible tops are available in white, black or blue.



The 1960 version of the Ford Thunderbird features a completely automatic convertible top, a new taillight arrangement, a restyled grille and other refinements. The convertible soft top is automatically stowed away in the trunk compartment, providing a smooth rear deck without detracting any from the rear seat passenger space. (A photo of the hardtop model was carried in October.)

Restyled interiors feature six all-vinyl, five vinyl and cloth, and four leather upholstery combinations. Arm rests, door panels and other interior appointments have been redesigned to complement the exterior changes.

Standard engine for the Thunderbird is the 352 cubic-inch, 300-horsepower V-8 with four-barrel carburetor. As an optional power plant, the Thunderbird is available with the 430 cubic-inch, 350-horsepower V-8. Either engine can be matched with Ford's Cruise-O-Matic transmission, a dual range automatic transmission for greater highway economy and more responsive city performance.

Exhausts Trapped Air

The standard three-speed manual transmission also is available, and with the standard V-8 engine, overdrive is optional.

The sliding roof option consists of an all-steel panel which slides on aluminum guide rails, and can be locked in any partially opened position. When fully to the rear, the sun roof has an opening of 19 by 34 inches. Channels and drain tubes prevent leakage into the passenger compartment.

An air deflector above the windshield moulding deflects the air past the opening and creates a vacuum which exhausts air from inside the passenger compartment, thus providing improved air circulation.

On hot days, when the car has been parked in the sun for some time, opening the roof immediately provides an escape for the trapped hot air.

Operation of the fully-automatic convertible top is controlled from the driver's seat. After unlocking the two clamps at the top of the windshield, pulling the T-handle switch begins the operation. The rear deck lid rises, permitting the top to fold neatly out of the way into the trunk area. When the top is fully folded, the deck lid lowers and locking screws fasten the deck lid firmly into place. Raising the top is just as simple; pushing the T-handle starts the electric mechanism that raises the deck

(*Continued on Page 84*)

Among the features of the 1960 Thunderbird is this optional sliding roof panel on the hardtop model. In winter or summer, the new sun roof provides improved air circulation in the passenger compartment. The all-steel panel slides on aluminum guide rails, and when fully to the rear, has an opening of 19 by 34 inches.

Shorter Falcon Has Interior Roominess

Two feet shorter than the 1959 Ford, the Ford Falcon provides interior roominess comparable to standard American cars. It is powered by a 90-horsepower, 6-cylinder engine, front mounted, which has a displacement of 144 cubic inches. Wheelbase is 109.5 inches with an overall length of 181.1 inches. Shown here is the two-door model. (A photo of the Falcon Fordor and complete details of the new line were presented in our October edition.)

PARTNERS IN PLATING PROGRESS

Udylite, in close cooperation with the metal finishing industry, constantly seeks the answers to the practical problems of everyday production. As a result of this partnership-to-improve plating and products, many important advances have been made. A worthy partner, Udylite presents a complete and far reaching program in six major areas of activity. Let us, if we do not already, share the benefits of this program with you.

- Udylite Research Corporation . . . especially created for experimental development of new and improved plating processes . . . devoted exclusively to bringing you better finishes, reduced costs, increased production.
- Udylite Engineering . . . a balanced team of top mechanical, electrical and chemical experts, creators of the most advanced equipment automation . . . always prepared to help you with your special machine design problems.
- Udylite Customer Projects . . . special research worth hundreds of thousands of dollars is our annual investment in our customers' future operations . . . experimental plating, solution analysis, process adaptations, to solve otherwise costly problems for you daily.
- Udylite Supply Services . . . dedicated to affording you worry-free buying assistance and delivering your every plating need with assurance of first quality materials and close adherence to price and delivery deadline.
- Udylite Electrical Development . . . prime source for years-ahead electrical design and development by specialists . . . to meet your most demanding requirements for long lasting equipment that will keep down work stoppages, reduce maintenance expense and lower replacement costs.
- Udylite Field Services . . . factory experienced sales engineers and trouble shooting crews always on call to keep your equipment functioning . . . to help you meet vital production schedules.

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Erects World's Largest Lime Kiln

Ground has been broken at Ludington for what is believed to be the world's largest capacity lime kiln. It will be built at the Ludington Division of The Dow Chemical Company, adjacent to two other kilns already operated there by the company.

First Of Its Type

Louis N. Carmouche, manager of Dow's Ludington Division, said the kiln will be designed to produce approximately 600 tons of lime per day, well beyond the range of present-day lime kilns. This will almost double the capacity of Dow's present lime-producing facilities at Ludington.

It will be the first of the new Allis-Chalmers-Lepol type grate kilns devoted to lime production in the United States, Carmouche said. Several of this new type have been built for cement production.

An expanding market for lime products manufactured at Ludington made the new kiln necessary. It will calcine limestone from northern Michigan to chemical grade lime for use in other plant processes at Dow's Ludington Division.

Dow has contracted with the Allis-Chalmers Manufacturing Company, of Milwaukee, to build the facility. It is scheduled for completion by approximately Aug. 15, 1960.

The kiln will be about 160 feet long and 11.5 feet in diameter, relatively normal dimensions. Pre-heating of the limestone at the Lepol grate facilities enables the sizeable boost in capacity.

200-Foot Smokestack

In conjunction with the building of the new kiln, Dow will erect a new smokestack more than 200 feet tall at Ludington to service all three of its lime kilns.

Ambassador Adds 3-Seat Station Wagon

American Motors Corporation's compact luxury car, the Ambassador V-8 by Rambler, featuring new exterior and interior styling and a completely new three-seat station wagon, made its public bow on Oct. 14.

Ease of handling and parking, efficient V-8 performance, and overall economy of operation are characteristics of this compact car in the luxury field.

Two-Piece Grille

The Ambassador V-8, built on a 117-inch wheelbase, is available in a Super and Custom four-door sedan, station wagon and a new three-seat station wagon, and Custom hardtop sedan and hardtop station wagon.

The new models have a two-piece, die-cast grille, with a textured rectangular pattern, which extends across the entire width of the car. The grille is set off by a massive upper chrome bar which extends upward into the opening below the hood. The opening carries the name "Ambassador" spelled out in bold chrome letters.

An entirely new "compound wrap-around" windshield extends into the roof. It has an area of 1,372 square inches (a 24 per cent increase over 1959), and is slanted at a greater angle to reduce wind resistance.

New split-type front and rear bumpers blend into the new styling of the car. The bumper guards extend downward to protect the sheet metal below the bumpers. License plates are housed in a protective recess between the split bumpers. Parking and directional lights are located below the bumpers in a recessed position.

The front fenders blend into the hood and grille. The low, broad hood affords maximum forward visibility. Ornaments are mounted on each of the front fenders. Dual headlights are mounted high in the fenders for greater efficiency under all conditions.

Provides Easier Entry

For improved ease of entry into the front seat, the front corner posts have been moved 3½ inches forward at the base. Without affecting entrance height, the new roof panels have been lowered for a sleeker appearance.

The new and larger wrap-around one-piece rear window extends upward into the roof panel, with glass area increased 14 per cent.

A gently flaring rear fender starts at the leading edge of the rear door and flows horizontally to the end of the rear fender. A chrome molding along the outer edge accents the fender line.

The outer frames of the taillights blend into the contours of the rear fenders. A chrome die-casting encircles the upper stop light and lower back-up lights.

For maximum trunk space, the rear deck lid is high and flat. The bottom edge of the trunk is just above the rear bumper for ease of loading.

Missile-Type Spear

The new three-seat station wagon employs a side-hinged rear door for easy entry and exit, eliminating the necessity of climbing over an extended tailgate. The door can be key-locked from the inside or outside. The rear window lowers into the door from the inside.

The side panels of the Ambassador feature a tapering missile-like spear, beginning at the front fender and extending to the taillights. Combined with two chrome mouldings, the area carries an accent color on Super models, and is covered with silver anodized aluminum on Custom models.

Sixteen solid colors are offered, along with 32 two-tone combinations on the Custom models and 22 on the Super models.

Overall length and height have been reduced on the 1960 Ambassador line. The length of sedans and hardtops has been reduced 1.65 inches to 198.5 inches, and the height has been decreased 1.7 inches to 57.6 inches. Station wagons are 4.11 inches shorter and 1.1 inches lower.

270-Horsepower Option

The Ambassador is powered by a 250-horsepower V-8 engine equipped with a twin-barrel carburetor. It has a compression ratio of 8.7 to 1, a displacement of 327 cubic inches, and a bore of 4 x 3¼ inches. It uses regular grade gasoline.

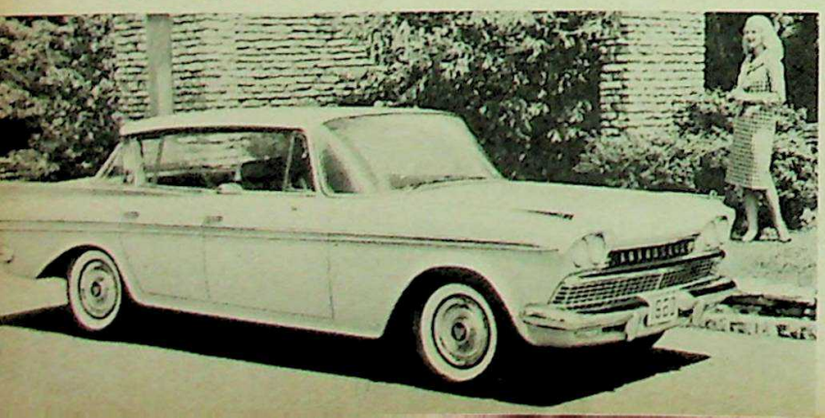
Offered as optional equipment is a 270-horsepower V-8 engine with a compression ratio of 9.7 to 1, equipped with dual exhausts.

Three transmissions are available. Flash-O-Matic automatic transmission, operated by an improved push-button system, is offered as optional equipment. Optional overdrive and standard sycromesh also are offered.

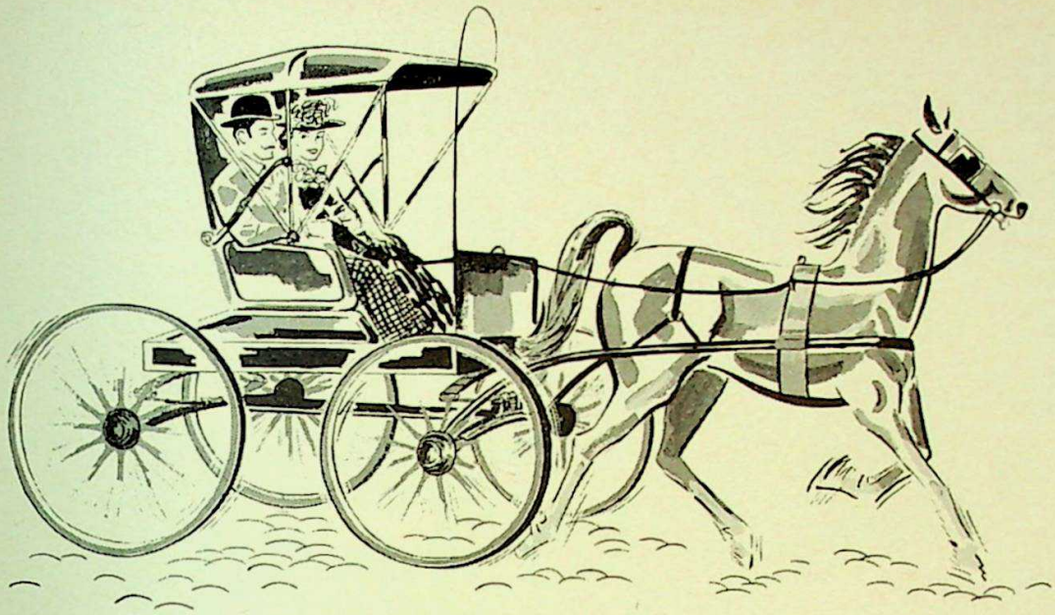
The steering linkage with new prelubricated ball joints having nylon bearing surfaces, which never have to be regreased, are standard on all models.

Bonded brake linings replace riveted linings, offering longer brake life and eliminating the danger of scored brake drums.

Shown here is the four-door hardtop sedan version of American Motors' compact luxury car, the Ambassador V-8 by Rambler, featuring new exterior and interior styling. It is powered by a 250-horsepower V-8 engine which uses regular grade gasoline.



A new three-seat station wagon has been added to the 1960 Ambassador V-8 by Rambler line. The three-seat station wagon is the only American-made car featuring a side-hinged rear door for easy entry and exit into the rear-facing third seat.



The horse and buggy has gone out of date... but **ELECTRICITY** and **NATURAL GAS** *are still in style today!*

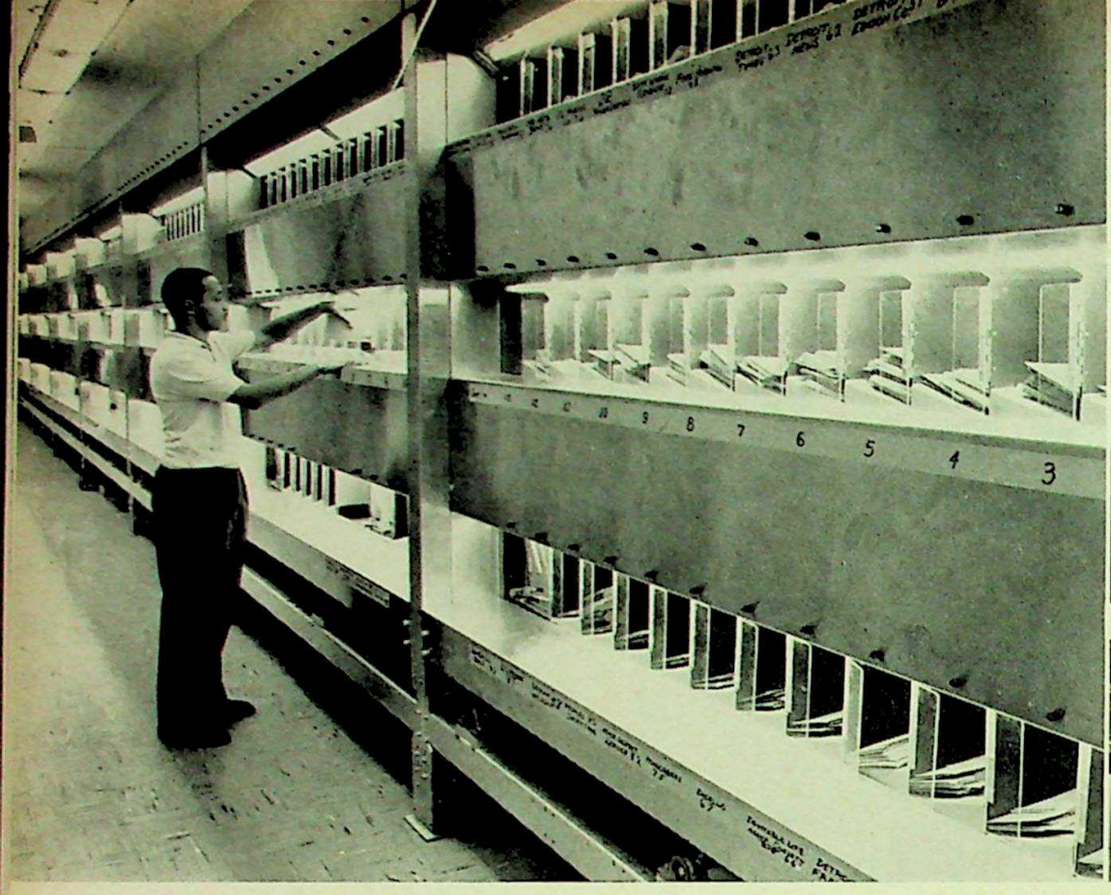
Way back in the horse and buggy days electricity and natural gas services were the pride and joy of home owners and business establishments. *Today they are a necessity . . . far more dependable and economical.*

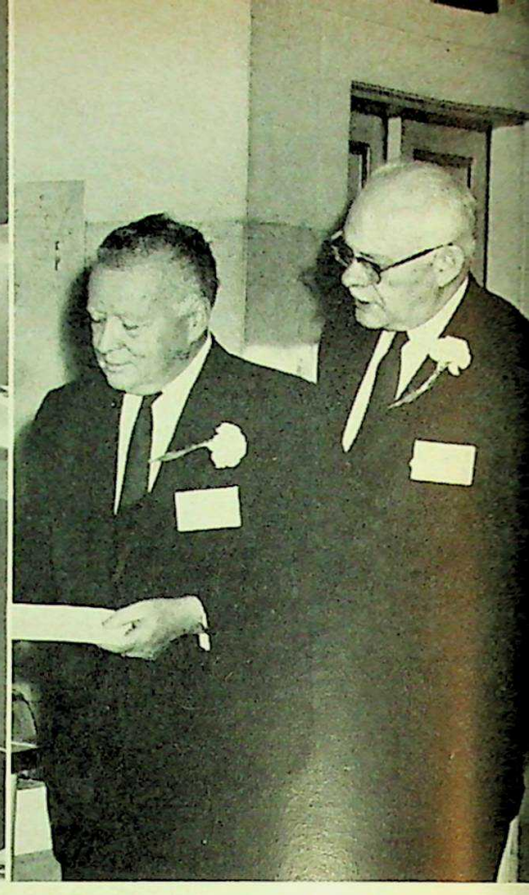
Few people realize the important role electricity and natural gas play in today's economy and today's easier, better way of life. *Wherever the power lines go . . . wherever the pipelines go . . . progress follows.* Electricity and natural gas are the versatile, low-cost, miracle fuels that enable industry to expand and produce an ever-increasing supply of the goods and services that help make America the best place in the world in which to live.

Consumers Power Company is proud to have a part in the progress of Outstate Michigan. Its expenditures for expansion and improvement of its electric and natural gas facilities in 1959 alone will exceed $117,500,000. This is the largest one-year expansion and improvement budget Consumers Power Company has ever had. *If "dollars talk" they speak volumes for the confidence Consumers Power has in the continued growth and prosperity of Outstate Michigan.*

CONSUMERS POWER COMPANY

Going Forward with Outstate Michigan





Shown here is the world's largest capacity letter sorting machine, capable of sorting 43,000 letters an hour for 279 destinations. Built by Burroughs Corporation, Detroit, it was demonstrated in Detroit recently as one of the features of a special Post Office Department exhibition known as the "Parade of Postal Progress".

Postmaster General Arthur E. Summerfield, who came to Detroit especially to open the exhibit, is shown in the photo at the right talking to Detroit's Postmaster Edward Baker (right).

Exhibit Features Largest Letter Sorter

Feature of the recent "Parade of Postal Progress" exhibition in Detroit was the world's largest capacity letter sorting machine, made by Burroughs Corporation, Detroit, which is capable of sorting 43,000 letters an hour to 279 destinations. The machine is 78 feet long and 9½ feet high. It is the first of ten being built by Burroughs under a $1,869,000 research and development contract with the Post Office Department.

Machine Size Varies

With machine sorting, letters move automatically in front of a human operator seated at a keyboard. As each letter passes, the operator presses several keys. This sets wheels in motion inside the machine to route the letter to any one of the 279 destination slots.

The 279 destination bins or slots shown in the above photo along the back of the Burroughs letter sorter, receive letters sorted through individual operator consoles. Each bin represents one destination. Letters are dropped from the continuous conveyor belt trays into proper destination bin by an electro-mechanical coding system activated by the operator. Each bin is equipped with an electronic eye that flashes "full" signal on supervisor's control panel as bin nears maximum capacity.

In addition to having the greatest capacity, the new Burroughs letter sorter is the first to be readily adaptable for use in post offices of varying sizes, Summerfield pointed out. A feature of the new machine, he explained, is that a single sorting machine can be equipped with varying number of standardized identical (modular) units and supported by input stations from one to a total of twelve keyboards.

Detroit, the sixth largest postoffice in the United States, will have a maximum of 12 sorting keyboards but a medium size post office could have, for example, six of the consoles to start with, and other keyboards could be added to the same machine as volume increases.

Detroit Will Get 30

The Detroit post office, Summerfield said, is the clearing house for all Detroit Metropolitan Area mail, and for nearly two-thirds of all the mail coming into Michigan. The Detroit office will move into an ultra-modern, $23,000,000 building late next year, which will be equipped with 30 of this type of letter sorter, he said.

Edward Baker, Detroit's postmaster, said that completion of the new building in Detroit next year not only will give the city greatly enlarged and more efficient postal facilities, but also will add a valuable piece of property to the city's tax rolls.

Under Post Office Department practice, the buildings are erected by private builders and then leased to the Post Office Department for 30 years, with renewal options extending up to 50 years, he explained.

Merger Of Paper Firms Recommended

A merger of the Sutherland Paper Company and KVP Co., both of Kalamazoo, has been recommended to the stockholders by representatives of the directors of both firms. If approved, the merger would bring together two paper industry firms with combined annual sales in excess of $100,000,000, and employing nearly 8,000 persons.

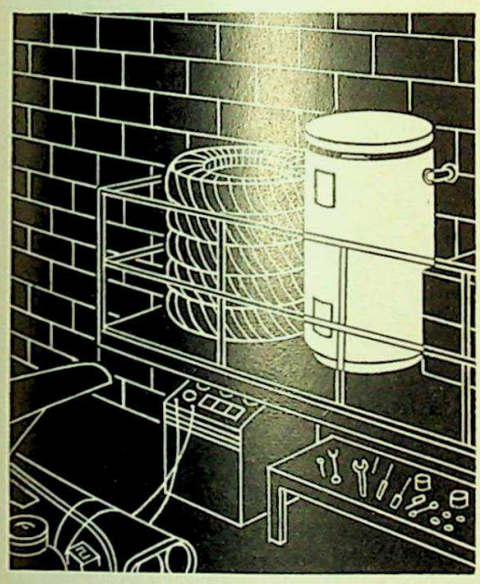
Sutherland also has plants in New York, California, Georgia and Illinois. KVP Co., formerly known as Kalamazoo Vegetable Parchment Co., also has units in Georgia and Ontario.

Under the proposed plan, 1.2 shares of common stock of a new company would be traded for each share of KVP and one share of common stock of the new company for each share of Sutherland.

Dwight L. Stocker, president of KVP, would become president of the new firm to be known as KVP Sutherland Paper Co.

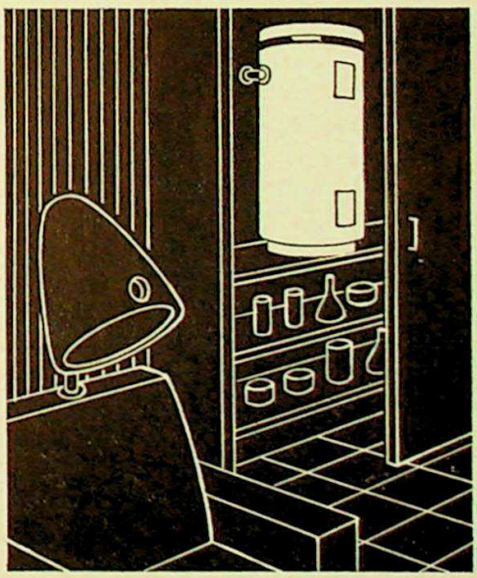
Chrysler Corporation announces the sale of its plant at 20012 Exeter avenue, Detroit, to **Pepsi-Cola Bottling Co.** The latter will use the building to house all Detroit operations, which will be transferred next spring from the present location at 3659 Gratiot avenue. The plant was acquired by Chrysler in 1953 and until last year had been used for plastics experimental work and interior trim production.

WATER HEATING GETS OFF THE FLOOR IF IT'S ELECTRIC



on an unused ledge or a balcony where there's available space.

suspended in any location close to point of greatest use.



on a shelf in a storage closet—even an airtight closet.

"INSTALL ANYWHERE" is the key to every commercial Electric Water Heater installation. This exclusive feature lets you design *with* the water heater instead of *around* it. You plan its location exactly where you want it. Every inch of valuable floor space is efficiently used. Check these versatile Electric Water Heater features:

SAFE—no flame, no flue

EFFICIENT—flexibility permits short pipe runs

COOL—outer shell cool to the touch all over

AUTOMATIC—install it and forget it

Ask us about capacities and specifications. We'll be glad to help you solve your difficult water heating problems with an Electric Water Heater.

DETROIT EDISON

U. S. Department of Commerce—Your Business Ally

U. S. TRADE AND INVESTMENT IN AFRICA

For the first time the U.S. Department of State has appointed an Assistant Secretary of State for African Affairs and has established a Bureau within the Department for that area. This was made possible by law of the 85th Congress, which recognized in effect that the relations of the United States with Africa demand equal attention to that paid to other geographical areas of the world. It is well known that Africa is in a state of profound economic and social change.

WM. T. HUNT

The new Assistant Secretary of State for African Affairs has stated that current developments in Africa may well be as important politically as those that occurred during the industrial revolution in Western Europe or those following the Bolshevik revolutions in Russia. The "New York Times" recently said editorially that "one of the outstanding phenomena of the contemporary world" is what it called "the sudden, thrilling, agonizing upheaval of the African races after countless centuries of primitiveness, subjection and isolation from the civilized world."

This article, in keeping with our Commerce functions of trade and commerce, will be related only to aspects of present and potential trade and investment.

Continent of Africa. The vast and varied continent of Africa is more than three times the size of the United States, including our new states, Alaska and Hawaii. It comprises about one-fifth of the land area of the world and has a population of about 220 million people of almost all races, speaking over 700 different languages and dialects. Politically, Africa has more than 40 different entities, including 10 independent states, 6 United Nations Trust territories, one League of Nations-mandated territory, and numerous territories under the jurisdiction of Great Britain, France, Belgium, Portugal, and Spain.

It is said that the African is primarily concerned now with independence, but that secondly the African nations are preoccupied with furthering economic and social development. There is increasing broad and effective consultation taking place among African nations and territories. Information on the status of the various parts of Africa is available through our Field Office.

U.S. Interest in Africa. U.S. trade with Africa, which began in the days of the New England clipper ship, has grown to total about $1,200,000,000 annually and our direct investment totals more than $600 million. Sub-Saharan Africa today provides the U.S. with many of its most important raw materials, such as uranium, cobalt, diamonds, columbite, gold and manganese, and minerals of strategic as well as commercial importance.

Our direct investment is continuing to grow. A large portion of this investment is in mining, with other undertakings including the operation of an air line in Ethiopia, the manufacture of consumer goods, and the assembly of automobiles in South Africa.

In the period between 1946 and 1957 our trade with Africa (excluding Egypt and the Sudan) increased by 60%. The major share of our exports went to the Union of South Africa but our imports came from all over the continent. Parenthetically, the fact that the major share of our exports goes to the Union of South Africa, economically the most highly developed African nation, dramatically demonstrates one of the principal economic arguments for our continued contribution to the economic development of other parts of Africa, for the higher the degree of economic development the greater our trade becomes.

Aid to Africa. Under the Mutual Security Act, our economic and technical assistance programs have grown from $81,700,000 two years ago to a planned level of more than $108 million for the current fiscal year which began on July 1, 1959. This assistance is helping to remove such obstacles to development as lack of capital and a shortage or absence of various technical and administrative knowledge and skills. About 650 American technicians are already in Africa engaged in activities the most numerous of which are in the fields of agriculture — Africa's primary economic enterprise — and in vocational, primary and teacher education. Mutual Security funds have also been channeled through the Development Loan Fund to five African nations to help build essential communications, transportation and power facilities. The Export-Import Bank and the sale or grant of surplus agricultural commodities also make important contributions to our assistance efforts in Africa.

The United Nations and its Specialized Agencies have undertaken extensive programs for economic and technical assistance in Africa. For example, the International Bank for Reconstruction and Development has loaned $400 million in Africa up to the present time. The Expanded Technical Assistance Program devoted about $4 million to Africa in 1958. The new UN Special Fund, under the direction of Paul Hoffman, has already allocated $705,000 for projects in Ghana and Guinea. Furthermore, the United Nations recently established an Economic Commission for Africa, with headquarters in Addis Ababa, to help promote economic development on the Continent. In all of these activities, American money and American technicians play an important role.

Our Commerce office in Detroit has a great amount of economic and commercial information about the various segments of Africa. This includes specific individual investment studies covering the Federation of Rhodesia and Nyasaland, the Union of South Africa, and Nigeria. Also, there is basic data on the economy, trade statistics and information on establishing a business, licensing and exchange controls, import tariff system, living conditions, preparing shipments, and other business facts.

Wm. T. Hunt

Manager, Michigan Field Office
United States Department of Commerce
Federal Building, Detroit

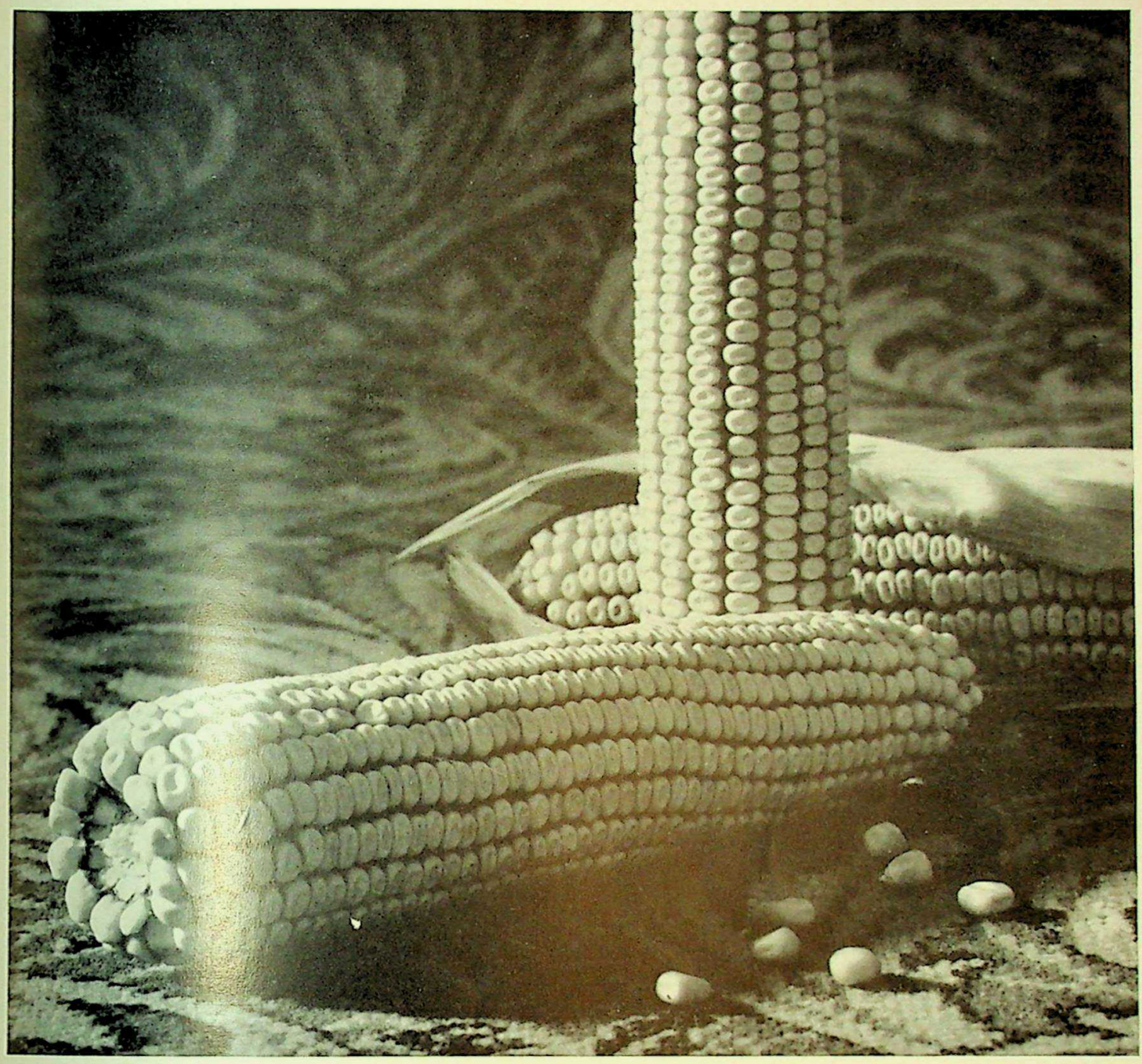
Occupies Detroit Headquarters Building

Rapistan of Detroit, Inc., has opened new sales, service and engineering headquarters at 22223 Telegraph road, it is announced by Jack Sheel, general manager of the Detroit organization. Representing the Rapids-Standard Co., Inc., Grand Rapids, manufacturers of the Rapistan line of materials handling equipment, the Detroit firm serves not only Detroit but also the Flint, Bay City and Saginaw areas.

General offices are located on the second floor of the 80 by 80-foot building so that the first floor may be utilized entirely for storage and production. The Detroit firm also offers engineering, installation and preventive maintenance services in addition to sales and service functions.

New sales, service and engineering headquarters of Rapistan of Detroit, Inc., at 22223 Telegraph road.

On a recently completed "quarter-million-mile experience run," 14 new Falcon cars, Ford Motor's new compact offering, averaged 28.44 miles per gallon. The average driver, over a 26-day period, traveled 615 miles per day for a total of 15,990 miles.



CARPETS OR CORN . . . WITH GAS Imagine the delicate heat control required to dry carpets without shrinking, or seed corn without causing germination! Both of these jobs are being performed daily with natural gas. So, too, are more than 25,000 other industrial processes, many requiring intense heat. Among them: tempering, annealing, dehydrating, heating, baking, drying. Whether the operation calls for speed, accuracy, flexibility or cleanliness, gas does the job—and at the lowest rates possible. It is probably cutting costs in your field. Find out! Call the Industrial Process Engineer at WOodward 5-8000, Ext. 6123. MICHIGAN CONSOLIDATED GAS COMPANY

So much more for so much less—**GAS** *naturally*

Tune in **"BUSINESS BAROMETER"—WJR,** Monday through Friday—**6:50-7:00 P.M.**

NEW CORPORATIONS

(With manufacturing concerns in bold face)

Flint Bumper Mart, Inc., 4705 North Dort St., Flint; manufacture automobile bumpers and parts; Anton Hanak $50,000

Inland Sea Area Corporation, 308 Michigan Theatre Bldg., Muskegon; deal in real estate and personal property; Thomas H. Andrews $250,000

The Interurban Gas Corporation of Michigan, Inc., 22536 South Telegraph Road, Trenton; manufacture and deal in compressed gases; Thomas Kohl $50,000

Schwarz's King Highway Drive-In, Inc., 3124 South Westnedge Ave., Kalamazoo; general restaurant business; Charles W. Schwarz $150,000

Assemblies, Inc., 8120 East Jefferson, Detroit; manufacture mechanical products; Frank B. Nair $150,000

Sav-A-Lot Distributors, Inc., 1126 Dime Bldg., Detroit; manufacture and deal in real and personal property; Thomas W. Kimmerly $50,000

Albert Manufacturing Company, 1150 National Bank Bldg., Detroit; general manufacturing; David Lebenbom $30,000

Detroit Development & Marketing Co., Inc., 23913 Michigan Ave., Dearborn; general merchandising and manufacturing and deal in licenses and patents; Clifford M. Mulqueeny $50,000

Early Wood Products, Inc., 1313 Huber Dr., Monroe; manufacture and deal wholesale and retail in wood and wood products; Henry T. Early $50,000

Supermarket Controls, Inc., 1657 Guardian Bldg., Detroit; manufacture supermarket equipment and general merchandise; Sheldon M. Lutz $5,000

Kasper Manufacturing Co., 7320 East 11-Mile Road, Centerline; manufacture machinery, tools; A. A. Kasper $100,000

Turtle Cabana Trailer Co., 939 Jennings St., Benton Harbor; manufacture and sell camping trailers; Burson A. Sink $100,000

Contact-Less Lens Service Corp., 1926 National Bank Bldg., Detroit; manufacture lens; Donald L. Golden $50,000

Fenley's, Inc., 25485 Grand River Ave., Detroit; manufacture and deal in curtains, drapes, linens; Newton Fenley $50,000

The Seminole Corp., 700 Michigan Trust Bldg., Grand Rapids; any commercial, industrial manufacturing or merchandising enterprise; Buford A. Upham $100,000

Industrial Export Corp., 509 Empire Bldg., Detroit; manufacture and deal in machinery; E. A. Ortega $50,000

New Era Finance, Inc., 614 Fox Bldg., Detroit; sell commercial paper and personal property; David Jassy $500,000

Detroit Screw Machine Products Co., 12265 Dixie, Detroit; manufacturing and machine shop business; Joseph A. Stasak $100,000

John R. Herman Co., 14400 Prairie, Detroit; manufacture automotive, aircraft, materials and supplies; Albert N. Kaufman $50,000

Jada Sales, Inc., 18038 James Couzens, Detroit; manufacture electrical fixtures and appliances; Albert I. Rice $50,000

Sample Furniture & Appliance Co., Inc., 2905 South Saginaw St., Flint; manufacture furniture and appliances; Sam Goldstein $10,000

Stereo Sound Systems, Inc., 1216 Catalpa, Royal Oak; manufacture electronic equipment; Sue Lewis $50,000

George W. Welsh Company, 150 Louis St., N.W., Grand Rapids; printing and publishing business; M. K. DeGroot $200,000

The C-O Corporation, 212½ Washington St., Grand Haven; any commercial, industrial or merchandising enterprise; Martin G. Vanschelven $250,000

Convenient Home Milk Delivery Service, Inc., 1635 East McNichols, Detroit; deal in dairy products and allied foods; J. Harry Brickley $250,000

Dri-Wall Coving, Inc., 4015 North Van Dyke, Almont; manufacture prefabricated coving and allied products; Floyd L. Havens $50,000

Fairlane Tool Company, Inc., 31537 Groesbeck Highway, Fraser; manufacture metals, dies, tools, fixtures; Richard T. Gordon $50,000

Sun-Brite Awning Company, Inc., 13101 Lakeview Drive, Belleville; general manufacturing; Van K. Zannis, Jr. $25,000

Tube House, Inc., 27 Jacokes St., Pontiac; manufacture ferrous and non-ferrous products; Julian Galan $50,000

Johron Industries, Inc., 9257 Virginia Ave., Livonia; tool and machine manufacturing business; Ronald G. Eates $25,000

Mallory Supply Co., 10600 Intervale, Detroit; general contracting, also manufacturing; Richard H. Mallory $25,000

Conner Fabricators, Inc., 555 Going St., Pontiac; deal in and manufacture industrial and consumer products; Charles C. Layman $50,000

Germain Tool Co., Inc., 64 Manchester, Highland Park; manufacture dielectric tooling, jigs and templates; Maurice S. Germain $50,000

Great Lakes Boat Works, Inc., 322 Selden Ave., Houghton; manufacture boats; Richard J. O'Brien $150,000

International Titanium Corp., 3125 East Larned, Detroit; general manufacturing and merchandising; Frank O. LeVita $50,000

Mont-Carlo Lanes, Inc., 14923 Plymouth Rd., Detroit; own and operate a bowling alley, also manufacture metals; Charles Reizen $50,000

Pool Mart, Inc., 31 South Huron St., Ypsilanti; manufacture swimming pools; Russell B. Armstrong, Jr. $50,000

R & S Stros Mfg. Corp., 26580 Nagel Ave., Roseville; general manufacturing; Richard Stros $1,000

Rockford Village Builders, Inc., 3120 Division, S., Grand Rapids; real estate and building; Harold Albert $250,000

Safeguard Research Laboratories, Inc., 24620 Manistee, Oak Park; general manufacturing; Jack Stone $50,000

Anna Records, 588 Farnsworth, Detroit; manufacture all kinds of phonograph records recordings; Basil W. Brown $10,000

Dryden Mfg. Co., Inc., 26269 Groesbeck Hwy., Warren; manufacture tools, dies; Myer L. Dryden $50,000

Consumers Power Erects Livonia Building

Construction of a new two-story office building, with attached warehouse and service buildings, to house operations of Consumers Power Company, will be started immediately on Farmington road near Plymouth road, Livonia, it is revealed by David H. Gerhard, Southeast Division manager for the company.

Gerhard said the West Wayne District will occupy an 11-acre site. The center will be completed in about a year and will house 225 employes. The building also will house an appliance sales floor, customer business office, and an auditorium capable of seating 250.

The West Wayne District includes Livonia, Plymouth, Northville, Farmington, Salem, South Lyon, Novi, Walled Lake and Wixom. Present offices in Plymouth, Wayne and Farmington will remain.

Leo Payne Ford, Inc., 6999 Spring Arbor Rd., Jackson; general manufacturing; Leo Payne $50,000

Pegasus, Inc., 28820 Mound Rd., Warren; general engineering and manufacturing; Richard J. Janes $50,000

Precision Cold Forged Products Co., 15396 Idaho, Detroit; general manufacturing; B. L. Maas $1,000

Timber Products, Inc., 730 River St., Allegan; manufacture pallets, boxes, crates; James H. McClure $50,000

Freezer Fresh-Michigan, Inc., 15141 Dartmouth, Oak Park; manufacture and sell ice cream and related products; Ramon J. Hollander $50,000

Jay Schultz, Inc., 10421 Fenkell Ave., Detroit; building, also manufacturing; Jay Schultz $50,000

Dearborn Muffler Sales, Inc., 10650 Plymouth Rd., Detroit; manufacture and deal in automobile mufflers and accessories; Norman J. Havlik $50,000

Formcote, Inc., 2334 Seminole Dr., (P.O. Box 1021, Lansing 4) Okemos; manufacture plastic coated panels for concrete construction; John J. McCune $1,002

Meco Fabrication Co., 8281 East 8-Mile Road, Warren; manufacture dies, castings, tools, fixtures; Ned W. Blakely $50,000

Aaronite Plastic Prod., Inc., 1035 Butterworth SW, Grand Rapids; manufacture plastic products; Gerald M. Grooters $50,000

Dearborn Chemical Corp., 6945 Orchard, Dearborn; manufacture chemicals; Adolph G. Martin $10,000

E & F Construction Co., Inc., 2947 Penobscot Bldg., Detroit; building and contracting, manufacturing; Sol E. Goldberg $20,000

Lodding, Inc., 1266 National Bank Bldg., Detroit; manufacture tools, jigs, dies, fixtures; James W. Fisher $50,000

Southgate United Engineering Co., 13474 Northline Rd., Southgate; manufacture screw machine products and welded components; Eugene J. Stroia $50,000

Longworth Tool & Die Co., 1435 Lawndale, Detroit; manufacture tools, dies, fixtures, machinery; Harry J. Chesney $50,000

George's Fine Sausages, Inc., 14035 Woodward Ave., Highland Park; manufacture sausages, lunch meats; Andrew S. Jackson $25,000

Display Works Co., 8180 Kimball Drive, Jeddo; manufacture mannequins for display purposes; Harold Weinbrecht $50,000

School Equipment, Inc., 25525 Harper Ave., St. Clair Shores; manufacture furniture and do a general manufacturing business; Frederick M. VanAsschе $250,000

Terminal Storage Corp., 4473 West Jefferson, Detroit; real estate and general manufacturing; Harold A. Johnson $48,000

The Crawford & Zimmerman Co., 428 South Saginaw St., Flint; deal in real and personal property; Charles D. Crawford $150,000

Forest Hills Foods, Inc., 1113 Kentwood Dr., NE., Grand Rapids; deal wholesale and retail in foods and food supplies; Howard G. VandenBerge $150,000

Ken-Tec Corp., 16244 Lauderdale Ave., Birmingham; manufacture tools, dies, jigs, fixtures, machinery; Constant Klepper $50,000

Ad Plate Engraving Co., Inc., 409 East Fort St., Detroit; manufacture photo engraving, printing plates; David M. Riekse ..... 450 shares N.P.V.

American Enclosure Co., 18335 Weaver Ave., Detroit; manufacture metal and glass household products; Donald H. Hug $50,000

Burr Aluminum Products Co., 408 Railroad St., Burr Oak; general manufacturing and merchandising; S. T. Barker, Jr. $80,000

Faigle Tool & Die Corp., 6500 Chase Rd., Dearborn; manufacture tools, dies, machinery; Robert Tuller $250,000

Lyon Gear & Machine, Inc., 4371 Territorial Rd., Lake Orion; general manufacturing & engineering; George A. Lyon $200,000

Ventaire Awnings of Down River, Inc., 1045 National Bank Bldg., Detroit; general manufacturing; Donald B. Williams $50,000

R. D. Seeley, Inc., 2073 North Dort Hwy., Flint; manufacture & sell tools, machinery; Robert D. Seeley $50,000

Ace Hydraulic Hinge, Inc., 9695 Monica, Detroit; deal in real & personal property, also do general manufacturing; Vincent E. Burke $50,000

Dearborn Dynamics, Inc., 1627 West Fort St., Detroit; general manufacturing; John R. Leigh $50,000

C. L. Frost & Son, Inc., 345 Summer Ave., N.W., Grand Rapids; any commercial, industrial or merchandising enterprise; Horace E. Frost $250,000

Header Heat Treat, Inc., 6349 Elmhurst, Detroit; operate a heat treating enterprise; William C. Badge, Sr. $400,000

Industrial Tackle Fabricating Co., 31275 Ryan, Warren; manufacture and sell fishing and other sporting equipment; Ray E. Shell $50,000

Marlette Wholesale Supply Co., 3274 Main St., Marlette; general manufacturing; Thomas G. Roeser $50,000

Pepper Industries, Inc., 325 Hillview Lane, Rochester; manufacture charcoal, charcoal by-products, picnic utensils; Harold Pepper $50,000

Smith-Nager Glass Corporation, 121 Leib, Detroit; manufacture and decorate products of glass, plastics and ceramics; Aubrey Smith $50,000

U-Con North Central, Inc., 8719 Woodside Court, Oak Park; general contracting, construction and general manufacturing; Donald L. DeCamp $50,000

Airo-Eliminator Corp., 20006 James Couzens Hwy., Detroit; manufacture and sell radio and TV devices; Harry J. Solomon $50,000

American Re-Tax Co., 8081 Hubbell, Detroit; manufacture foam rubber and foam rubber products; John R. Morrissey $50,000

Automatic Screw Products, Inc., 205 South Lincoln, Charlotte; manufacture and assemble screw machinery products; Claude A. Cooper $75,000

Catherine Street Corporation, 334 East Catherine St., Ann Arbor; general manufacturing and merchandising; Henry C. Bryant, Jr. $50,000

Delman-Vantines Blow-Molding Corp., 128 Kercheval Ave., Grosse Pte. Farms; manufacture assemblies, parts; Charles Bachrach $50,000

Detroit Diameters, Inc., 24946 Telegraph Rd., Southfield; manufacture metallurgical, mechanical and electrical products; Harold Spitery $50,000

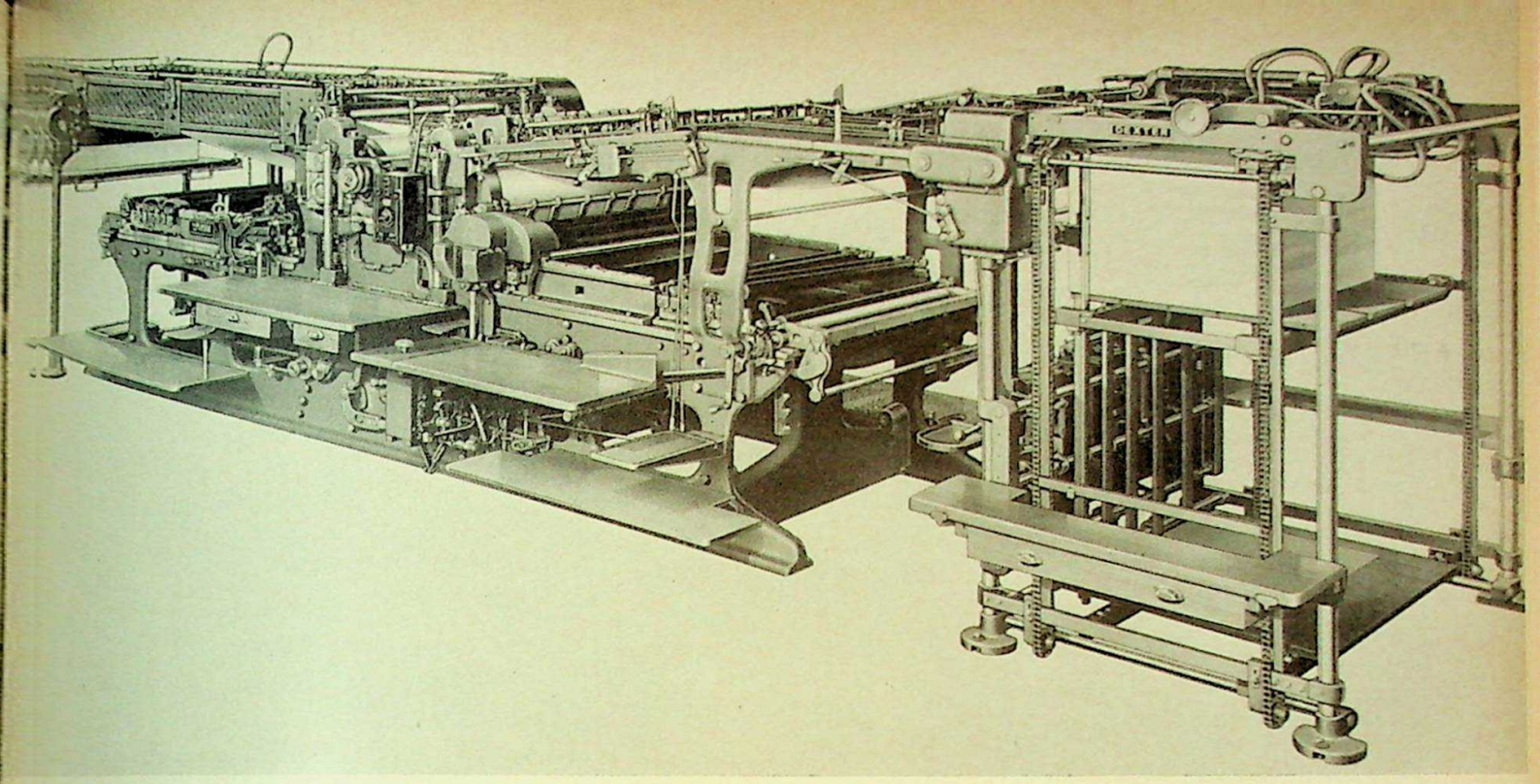
Horton Company, 135 Main St., Horton; general manufacturing and merchandising; I. J. Ziegler $100,000

Margaret Hurd, Inc., 446 Highland St., East Lansing; manufacture wearing apparel; Margaret Hurd Whitmore $10,000

Physicians Clinical Laboratory & Co., 334 East Catherine St., Ann Arbor; general manufacturing and merchandising; Henry C. Bryant, Jr. $50,000

Highland Appliance Concessions, Inc., 5301 Grand River, Detroit; manufacture and sell household appliances, radios, TV; David Mondry $50,000

(*Continued on Page* 98)



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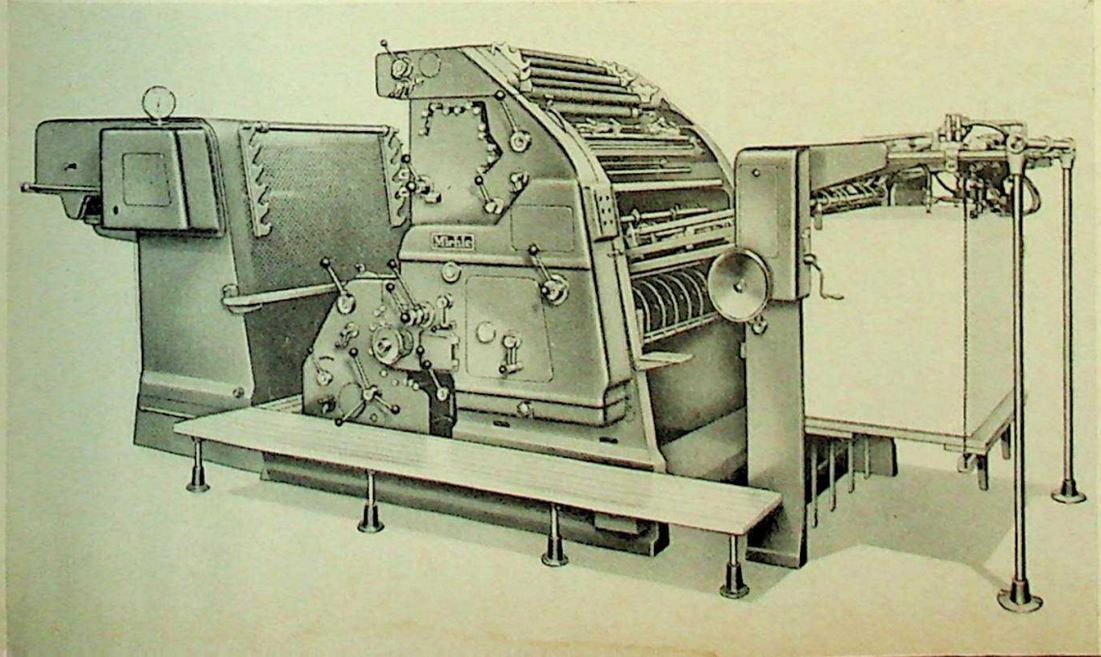


To meet the ever increasing requests of our customers—The Ann Arbor Press, Inc., in the last few years, has invested over one-quarter of a million dollars in new equipment.

Develops Diesel Engine For Taxicabs

A 97-horsepower Diesel engine especially suitable for use in taxicabs has been developed by the Detroit Diesel Engine Division of General Motors, and a pilot model installed in a Checker cab now is building up operating records in regular taxicab service on Detroit streets.

The engine is a three-cylinder model in the "53" series of small Diesels recently announced by the division. The unit starts and operates the same as any conventional automobile engine. In preliminary tests it has exceeded 24 miles per gallon of fuel, and has demonstrated idling, acceleration and engine speed characteristics which contribute to the greater economy needed in taxicab operation.

Sees Cab Use Growing

Although reductions in size and weight and other refinements have made the Diesel practical for many new uses in recent years, American manufacturers to date have not offered a Diesel completely acceptable to the taxicab market. But Robert E. Hunter, GM Diesel's general sales manager, believes no other group of power users can utilize the Diesel's recognized operating economy and its longer, trouble-free life to better advantage.

Hunter predicts that within five years rising fuel and repair costs will put Diesel power in up to 20 per cent of the cabs in operation.

GM Diesel's engine is immediately available and extensive taxicab installations will be made following completion of the carefully controlled cost and performance studies now in progress.

Ray Eggen, the Checker cab fleet owner, in whose cab the engine has been installed, reports that the pilot cab has been in service long enough to confirm good customer acceptance, and that its maneuverability and flexibility is comparable to any unit in his fleet. It handles well in traffic and can be asigned at will to any of his drivers with no previous operating experience.

Powered by a Diesel engine developed by the Detroit Diesel Engine Division of General Motors, this standard-make taxicab now is in regular service on Detroit streets. The engine is a 97-horsepower model.

No Widespread Use

Although the engine demonstrates that it now is possible to install American-made Diesels of this horsepower in automobiles, there is no prediction of its widespread use in private cars particularly in the United States. Hunter points out that regardless of progress made in reducing weight and size, the Diesel is still a "workhorse." Its economy and longer-life features pay off mostly in continuous 12 to 24 hour-a-day operation and average passenger cars do not approach this continuous use.

The development of this engine for taxicabs is another milestone in the Diesel industry's long-range objective aimed at increasing the usefulness of its product. Several years ago, GM Diesel announced its first small-boat engine and today the Division's marine units power craft 30 feet and less in length.

Hunter discloses that other units in GM Diesel's "53" series already have been made adaptable for use in small highway trucks, fork lift trucks, portable compressors and welders, and other small industrial equipment ordinarily powered by gasoline engines.

Clarke Joins Drake Associates

R. E. CLARKE

Robert E. Clarke, New York public relations executive, has joined Kenneth Drake Associates, with offices in the Buhl Building, Detroit, who serve as public relations counsel for clients nationally and locally.

Clarke resigned his post as director of radio and television and account executive for the Philip Lesly Company, New York public relations firm, to become an associate of the Drake firm. He had been with the Lesly firm in Chicago and New York for three years.

City Bank Opens Second Downtnwn Office

John H. French, Jr., president of City Bank, Detroit, has announced the opening of a second major downtown banking office in the First National Building (formerly known as the National Bank Building). Hugh B. Dunbar, vice-president, is the officer in charge.

H. B. DUNBAR

Complete banking and trust services are offered. The bank not only maintains a large branch office, but has moved a sizeable installment loan staff to the new premises. There also are commercial loan officers, in addition to all normal banking and trust services.

"We had two major reasons for this move," French said. "First, we wish to give the best banking service possible to downtown Detroit, and we feel that by having offices in both of the largest office buildings (City Bank's main office is in the Penobscot Building), we can best accomplish this. Also, the rapid growth of our bank requires additional downtown space."

First National Building officials previously had announced extensive remodeling plans which include $500,000 to be spent remodeling the building lobby, plus exterior changes, and removal of the main stairway leading to the second floor. These improvements will be completed early in 1960.

City Bank, founded in 1949, now has resources in excess of $155 million. The new office gives it a total of 11 banking offices.

Lark Offers Wide Color Choice

(*Continued from Page* 26)

option in 1960 for all two-door models as well as all other models equipped with reclining seats.

A new choice of colors is offered throughout the Lark line for 1960. New nylon, acetate and vinyl fabrics are fresh, with new interior designs harmonizing with exterior colors and trims as standard on the new cars.

TESTS CORVAIR CAB

Checker Cab Company, Detroit, reports that it is using a Chevrolet Corvair experimentally to test its potential for cab use.

Larger Engine For Studebaker Hawk

A new, larger V-8 engine highlights the Studebaker Hawk five-passenger sport coupe for 1960. Other improvements include a heavy duty transmission, larger clutch, heavy duty radiator, finned brake drums and heavier padding on the instrument panel.

The new V-8 power plant has been increased from 259 cubic inches displacement to 289 cubic inches. It develops 210 horsepower at 4500 r. p. m. with a torque rating of 300 at 2800 r. p. m. Compression ratio is 8.8 to 1. A four-barrel carburetor, increasing horsepower to 225 at 4500 r. p. m. and torque to 305 at 3000 r. p. m., is available as optional equipment.

Dual Exhausts Standard

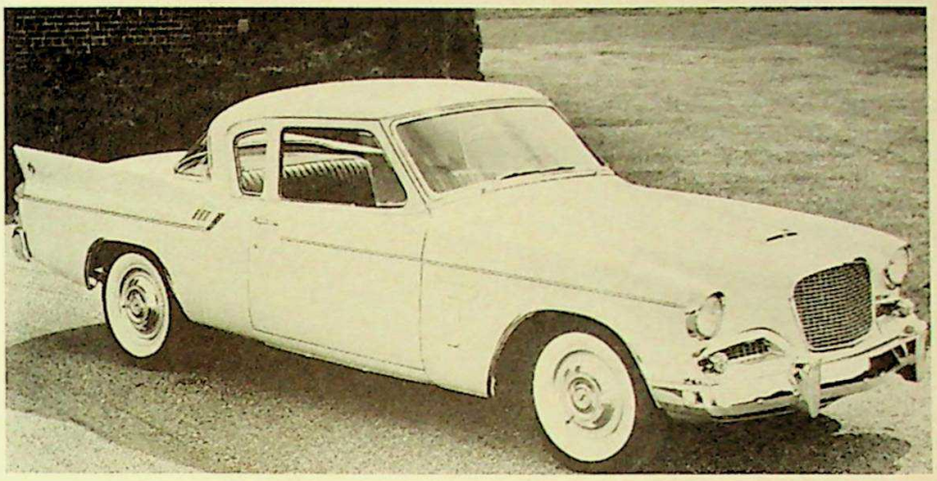
Dual exhausts are standard equipment. The engine has been designed to operate efficiently on regular gasoline.

Retaining its classic styling for 1960, the Hawk's 204-inch-long body is mounted on a wheelbase of 120.5 inches. Its overall height, when loaded, is 55.5 inches.

The size of the clutch has been increased from 10 to 10½ inches. Hawks are available with either conventional, overdrive or automatic transmissions.

Finned, weatherseal-type brake drums, offering the advantages of rapid cooling, are standard on Hawks. Other changes are a newly-designed horn button bearing a Hawk emblem and new nameplates on the fenders.

Hawks for 1950 continue to offer rugged box section, ladder-type frames with road-proven torsional and beam strength; variable rate coil springs; and stainless chrome moldings for the windshield and windows.



Classic sport car styling and a new, larger V-8 engine are the highlights of the Studebaker Hawk for 1960. This five-passenger coupe offers a new heavy duty transmission, larger clutch, finned brake drums and dual exhausts.

Also offered as options are power brakes, power steering, air conditioning, Twin-Traction "limited-slip" differential, and the automatic hill holder for cars with conventional or overdrive transmissions.

Seven Exterior Colors

Head rests are optional with any combination of split back seats. Individual front seats, independently adjustable, and reclining front seats are available optionally. The reclining seats can be supplied with either solid cushion and split backs or individual cushions and backs.

Interiors are offered in a variety of fabric and vinyl upholstery color schemes to harmonize with the seven exterior colors. All-vinyl interiors are available optionally.

Other options offered exclusively for Hawks are tachometers and deck lid mounted radio antennas.

Dedicates New Grand Rapids Terminal

Complete new office and terminal facilities were dedicated recently in Grand Rapids by Associated Truck Lines, Inc. Located on a 10-acre site, the new facility accommodates all equipment and employe cars within its boundaries. Offices are completely air-conditioned and equipped with the latest accounting and communication equipment.

City pick-up and delivery is controlled through two-way radio communications, while over-the-road dispatching is handled by over 900 miles of inter-terminal private telephones.

The terminal platform is equipped with an electric conveyor system to speed small shipments on inbound deliveries and outbound loads. It also is equipped with electronic axle scales which automatically record loaded weights and light a sign which gives the driver this information visually.

The new Grand Rapids terminal has 61 loading doors in a 70 by 312-foot area, with a 652-foot Towveyor system having a capacity of 55 carts.

An even larger facility of the same nature was dedicated in Chicago recently by Associated. J. H. Fles, president, said the construction of the Grand Rapids and Chicago terminals involved approximately $1,850,000.

Exterior of the new Grand Rapids terminal of Associated Truck Lines, Inc., showing the modern offices and extensive dock facilities.

U. S. Rubber Advances Francis

Appointment of Robert G. Francis as assistant production manager of the tire division has been announced by United States Rubber Company. Francis, who now will have his offices at the Detroit plant, formerly was manager of the U. S. tire plant at Eau Claire, Wis.

R. G. FRANCIS

Francis started with the rubber company in 1933 at the Indianapolis plant. In 1939, he was named chief inspector of the tube division, and in 1944 became general foreman of the Chicopee Falls, Mass., plant after holding the posts of general foreman and production superintendent at company-operated ordnance plants in Des Moines and Milwaukee.

In 1951, he was appointed production manager at Chicopee Falls, became assistant factory manager at Eau Claire in 1955, and was advanced to factory manager there in 1958.

BANK OPENS 10TH BRANCH

City Bank, Detroit, has opened a new branch office at Evergreen and Ann Arbor Trail — a unit of the new River Oaks Shopping Center. The attractive new branch, tenth for City Bank, features "sit-down" check desks, an unusual customer's lounge area, and all normal banking services.

Ah, The Doing and Undoing

WATCH IT!

Secretary of Commerce Frederick H. Mueller, advised members of Detroit's Economic Club—and all businessmen—to:

"(1) think more deeply on public questions; (2) speak up more frequently on vital issues; (3) play a more active role in public affairs; and (4) encourage more political action by young people."

We, of course, agreed, but we give you, if we may, Lesson 3, if you "are going into politics."

Too much abuse creates sympathy
Too much praise swings the other way
Too much hate blacks out vision
Camouflaged selfishness evokes derision
Too much emotion ruins a cause
Too little heart ignores moral laws
Too much complexity starts a wrangle
Over-done sympathy hides an "angle."
Too far to the left, too far to the right
Threatening our State with endless blight.

PERHAPS

Listed between "The Guy With the Knife," and something like "Who Drove the Nail in the Baby's Ear," was "The Battle Hymn of the Republic," by the Mormon Choir and the Philadelphia Symphony. Of all places the hymn was listed among the Top Ten "favorites" of disc jockeys. Perhaps, we thought, perhaps, people are turning to such worthwhile things as "His Truth Is Marching On,"—but we are not too optimistic.

YOU ARE DOING PRETTY WELL —ON "AVERAGE"

In 1957, on the last figures available, just issued—if you were "average," which we know you were not, your income was in the $4,500—$5,000 bracket. After exemptions and deductions you had a taxable income of $2,250 and paid income tax of $450. Your average deductions were $2.60 for interest, $315 for taxes, $263 for contributions, and $180 for medical outlays. Your income from dividends was $31, your capital gains $14, and income from interest $25. After we read that—and remember it is 1957—we envied our maid and also the nurse we paid for six months.

And then we found, income-wise, we were in the, then, top 12% income bracket, but after taxes we barely made the top 50% bracket. But, we never believed there was any such thing as "average" man or "average family"—but if there is, we are it!

TV

You have probably been hysterically awaiting our verdict on TV scandals. Very well. We believe there are as many completely honest men and women in TV as in any business, profession, union or other activity. But if TV must call a halt to some of its activities, we suggest they go after the pitch-patent medicine men who, worried doctors tell us, do much more harm to the health, mental and physical, of the gullible than the quiz programs ever did to their morals.

WORDS OF THE WISE —AND OTHERWISE

"We have tried since the birth of our nation to promote our love of peace by a display of weakness. This course has failed us utterly."

—Gen. George Catlett Marshall

"We licked the Axis
Now, we are licked by taxes."

—Retired Red Arrow Colonel

"A diplomat is a gentleman who always lets you have his way."

—A Panel Member on a CBC Radio.

"A buck's a buck or at least it used to be and I guess we still think it is."

—William Zalenka

Financial Secretary of the West Side (Chi.) Neighbor Club, organized in 1938 when dues were set at $1.20 annually. Despite efforts to raise the dues, the members are "cold" and the dues remain the same. The club works for charitable causes by giving dances, parties, etc.

"If you can't think of something nice, don't say anything, and if you can't think of anything, say something nice."

—Yale Prexy **Whitney Griswold** offering "gratuitous advice" to his former colleague, D.F.C. Mendenhall, newly elected president of Smith College after Dr. M. created "news" by deploring the "prevailing mania for early marriage" by U students.

"Actuaries have found that man's hips, and seats, are growing bigger. Well, Erroll Flynn died and General Marshall died and Erroll Flynn was in the headlines for three days. It don't need actuaries to see that heads are bigger than seats. Does it?"

—Our Favorite Taxi Driver

"I'm an intellectual optimist."

—Harper's Editor **Russell Lynes** lecturing in Detroit. Mr. Lynes has said that if you're a highbrow, you number with the elite. In our social structure the middlebrows are the bourgeoisie and the lowbrows fall into the category of hoi polloi.

"Every society can find its own way to salvation, and it is stupidity or arrogance to expect the political and social evolution of the world to be based on universally accepted principles and practices."

—D. W. Brogan
in The Manchester Guardian Weekly.

"The internal combustion engine mounted on wheels, and provided with highways, has surely done more to our economy, our cities, our countrysides, our way of life, and all other aspects of our society than any other material feature. I am sure that nothing has affected our nation more than its mobility. And nothing seems to be more envied by the have-not people in other lands."

—Erwin D. Canham
Editor of The Christian Science Monitor and President of the Chamber of Commerce of the United States.

"Tho man a thinking being is defined
Few use the grand prerogative of mind
How few think justly of the thinking few!
How many never think, who think they do!

—Jane Taylor

"—I think both Capital and Labor in our country had better really get down to work to meet and overcome a very real, very immediate threat to the type of life we prefer."

—Ex-U. S. Marine **Lou Feldmann** National Commander of the VFW in Detroit completing arrangements, with Spike Briggs, for the VFW Convention here next year.

"It might not be too wild a wager to bet that 25 years hence Russia and the United States will be in mutual alliance against the greatest menace the white race has ever faced."

—Columnist **George Rothwell Brown** concluding a column on the dangers of the Chinese Communists.

"If you're conscientious, an inferiority complex will make you work hard to refute your own opinion of yourself."

—Composer **Ira Gershwin** who says he has found a life-long inferiority complex "most enjoyable and profitable."

Named B. & P. Chief Engineer

E. V. SCHIRMER

Edward H. Perkins, Jr., vice-president and general manager of Brooks & Perkins, Inc., Detroit, has announced the appointment of Earle V. Schirmer as chief engineer. For several years Schirmer has been the company's chief design engineer.

J. S. Kirkpatrick, vice-president-research and development, will continue to handle industry contact on research and development and devote additional effort to new products and diversification planning.

CHRYSLER DIVIDEND VOTED

Directors of Chrysler Corporation have declared a dividend of 25 cents a share on the common stock, payable Dec. 14 to shareholders of record on Nov. 19.

Opens Grosse Pointe Office

First of Michigan Corporation has opened a new branch office at 17144 Kercheval in Grosse Pointe, it is announced by W. Sydnor Gilbreath, Jr., president of the Detroit investment banking firm. Raymond C. Leonard has been appointed resident manager of the new branch. He will be assisted by Peter Higbie and John Schmidt.

R. C. LEONARD

Offering a complete investment service to residents of the area, the new office has direct wire contact through New York and Chicago with security dealers in 100 principal cities in the United States and Canada. It also receives up-to-the-minute market information through the nationwide wire system of its New York correspondent—Clark, Dodge & Co., members of the New York Stock Exchange and other leading stock and commodity exchanges.

Besides free parking as a service to its Grosse Pointe customers, the new branch office offers the additional convenience of being open from 9:00 a.m. to noon on Saturdays and in the evening by appointment, as well as from 9:00 a.m. to 5:00 p.m. each weekday.

Ford's Comet Will Have 114-Inch Wheelbase

The Comet, a smaller-sized car to be introduced early in 1960 by the Ford Motor Company's M-E-L Division, will have a 114-inch wheelbase and will be of unitized construction, Ben E. Mills, Ford vice-president and general manager of the M-E-L Division, told a press gathering at the preview of the division's conventional sized models for 1960.

The Comet's six-cylinder engine will be located in the front, Mills disclosed. It will provide exceptionally good mileage because the engineers have reduced the weight of the car through design simplification and other improvements.

The Comet will be offered in 4-door, 2-door and station wagon models. It will seat six persons comfortably and will have considerably more luggage space than the small cars.

Chryslers Offer New Colors

(*Continued from Page 50*)

Fourteen of the 19 colors offered are completely new, with a total of 48 color combinations available. Color hues tend toward lighter iridescent shades.

Important safety options include a new vacuum door locking system, an improved electronic Mirror-Matic rear-view mirror, newly designed seat belts, an improved automatic beam changer unit, and four-light emergency warning flasher system which, when set, flashes all turn-signal lamps continuously in a highway emergency. The flasher system is a dealer-installed option.

The Crowell Carton Co. division of St. Regis Paper Co., Marshall, will build an addition to its office building.

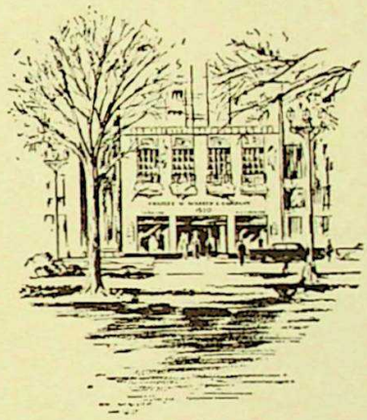
A

CHRISTMAS GIFT

from

WARREN'S

has a personality all its own



It is traditional that Warren's experienced personnel have always taken a personal interest in each selection, and this interest goes far beyond the purchase. The sales person who serves you sees that your selection is beautifully gift-wrapped. And the name "Charles W. Warren & Company" on the box gives added significance to the gift—to its excellent quality and sound value.

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U. S. AIR FORCE

Product	Contractor and Address	Value
Repair and modification dormitory bldgs., Orlando Air Force Base	Regina Building Co., Detroit	$ 49,800
Roller bearings	Bower Roller Bearing Div., Federal-Mogul-Bower Bearings, Inc., Detroit	50,600
Ball bearings	Kaydon Engineering Corp., Muskegon	35,625
Aircraft engines	Continental Motors Corp., Muskegon	28,825
Gaskets for fuel controls	Holley Carburetor Co., Warren	46,262
Engine spare parts	Aircraft Engine Div., Continental Motors Corp., Muskegon	91,724
Furnish and erect prefabricated buildings	Peninsula Construction & Supply Co., Iron Mountain	34,825
Valves for hydraulic pumps	Vickers, Inc., Detroit	35,229
Spare parts for fuel controls	Holley Carburetor Co., Warren	131,646
Aircraft spare parts	AC Spark Plug Div., GM, Flint	73,285
Aircraft tires	United States Rubber Co., Detroit	59,135
Maintenance and service for coordinate data transmitter and associated equipment	Burroughs Corp., Detroit	950,000
Actuators	Lear, Inc., Grand Rapids	88,942
Steel cable	American Chain & Cable Co. Detroit	212,582
Engine spare parts	Aircraft Engine Div., Continental Motors Corp., Muskegon	52,038
Maintenance platforms	Game-Time, Inc., Litchfield	25,333
Facilities for overhaul of J-73 engine	Curtiss-Wright Corp., Utica Division, Utica	240,000
Continuation of research, human capabilities in information detection and recognition	University of Michigan Research Institute, Ann Arbor	61,792
Rain repellent kits for aircraft windows and windshields	Dow Corning Corp., Midland	50,000
Brush and amplifier assemblies	Lear, Inc., Grand Rapids	107,262
Hydraulic pump assemblies	Vickers, Inc., Detroit	40,050
Fuel control diaphragm assemblies	Holley Carburetor Co., Warren	30,576

U. S. ARMY

Conduct studies on prevention, control and treatment of epidemic influenza	The University of Michigan, Ann Arbor	122,777
Manufacturer's representative services	Lear, Inc., Grand Rapids	71,719
Continuation of research on chick feeding and using gamma irradiated food	University of Michigan Ann Arbor	43,670

DETROIT ORDNANCE DISTRICT

Piston ring set	Continental Motors Corp., Muskegon	31,016
Carburetor assembly	Holley Carburetor Co., Warren	175,811
Aluminum alloy forgings	Bridgeport Brass Co., Adrian	37,449
Various assemblies for M60 tank	Defense Operations Div., Chrysler Corp., Centerline	169,010
Ethylene glycol antifreeze	The Dow Chemical Co., Midland	50,180
Vehicles engineer agency services for M48A2 series tanks	Defense Operations Div., Chrysler Corp., Centerline	532,880
Services to pack, crate, and ship excess inventories for redistribution	Defense Operations Div., Chrysler Corp., Centerline	35,832
Exhaust valve kits	GMC Truck & Coach Div., GM, Pontiac	37,828
Right arm assemblies	Chrysler Corp., Detroit	49,999
Tire capping material	United States Rubber Co., Detroit	49,762

U. S. ARMY ENGINEERS

Construction of fencing and pavement, K. I. Sawyer Air Force Base	Fisher Contracting Co., Midland	135,350
Construction, middle marker facility, Wurtsmith Air Force Base	Thunder Bay Construction Co., Tawas City	26,810
Product improvement	Continental Motors Corp., Detroit	142,147
Excavating angle courses, St. Mary's River	Dunbar & Sullivan Dredging Co., Detroit	4,212,790
Construction, communication building addition, Wurtsmith Air Force Base	L. A. Trapp Construction Co., Grand Rapids	42,447
Storage Tank	Ronan & Kunzl, Inc., Marshall	73,970

U. S. NAVY

Aluminum alloy	Bridgeport Brass Co., Adrian	26,343
Repair parts for Diesel engine	Detroit Diesel Engine Div., GM, Wayne	44,926
Precision thread grinder	Ex-Cell-O Corp., Detroit	84,890
Gear grinder and external automatic grinding machine	Michigan Tool Co., Detroit	
Educational instruction for 168 students	The Regents of the University of Michigan, Ann Arbor	62,000

U. S. QUARTERMASTER

Stainless steel mess kit pan	Zenite Metal Corp., Detroit	192,348

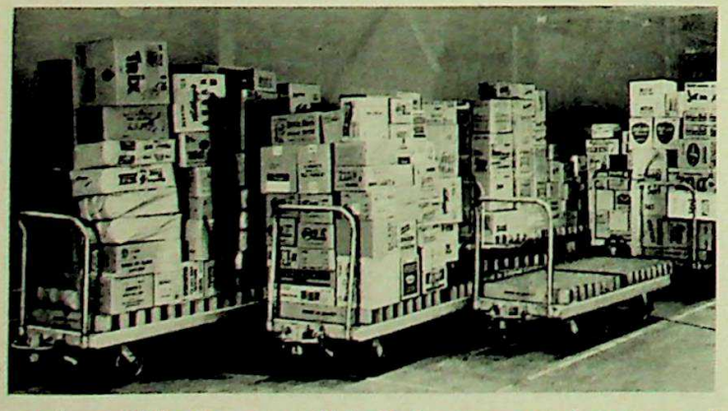
ARMED SERVICES

Washers & dryers	Whirlpool Corp., St. Joseph	76,700
Washers & dryers	Whirlpool Corp., St. Joseph	43,450
Manifold carbon paper sets	Port Huron Sulphite & Paper Co., Port Huron	
Bond paper	Hawthorne Paper Co., Kalamazoo	56,500
Sorting and restacking of magnesium ingots, Somerville, N.J.	Kennedy Contracting Co., Inc., Detroit	23,000
Slotted metal angles	The Rapids-Standard Co., Grand Rapids	25,000
Water welded steel tube	Standard Tube Co., Detroit	154,915
Tolbutamide tablets	The Upjohn Co., Kalamazoo	73,728
Diesel engines	Detroit Diesel Engine Div., GM, Detroit	34,825
Tomato juice	Lake Odessa Canning Co., Lake Odessa	52,349
Washers & dryers	Whirlpool Corp., St. Joseph	21,000
Control board sections	Kirkhof Electric Co., Grand Rapids	28,092
Tomato juice	Eau Claire Packing Company, Eau Claire	83,410
Tomato juice	Lake Odessa Canning Co., Lake Odessa	41,630
Tomato juice	Burnette Farms Packing Co., Hartford	41,630
General office steel desks	Steelcase, Inc., Grand Rapids	
Washers & dryers	Whirlpool Corp., St. Joseph	43,475
Washers & dryers	Whirlpool Corp., St. Joseph	65,010

DETROIT ORDNANCE TANK-AUTOMOTIVE COMMAND

Motor vehicle tow bar	Hawk Tool & Engineering Co., Clarkston	42,040
Automobile sedans	Cadillac Motor Car Div., GM, Detroit	86,958
Oil pressure gauge assembly	Electro-Mechanical Products Co., Garden City	81,460
Muffler to tail pipe extension pipe	Campeau Tool & Die Co., Wayne	84,469
Engine generator regulator control	Worden Specialty & Machine Co., Plymouth	83,244

Offers Ribbed Deck Stock Trailer



Palmer-Shile Company, Detroit, has announced an unusual type of trailer designed for the more efficient handling of grocery warehouse stock, featuring a special ribbed deck which makes possible the handling of stock of various dimensions without pallets. The deck permits lift forks to enter and move the stock. Shown here is a group of such trailers in a grocery warehouse, with the stock loaded on the ribbed decks.

Entrance of The Electric Autolite Company into the industrial battery market has been made with the completion of the purchase of the assets of C & D Batteries, Inc., of Conshohocken, Pa.

In the final ratings by an independent board of judges in the 19th annual report survey by "Financial World," national weekly magazine, Mueller Brass Co., Port Huron, was judged as having the best annual report of the Copper and Brass Industry.

Hanna Furnace Boosts Jolliffe

Frank Jolliffe, a sales executive of the Hanna Furnace Corporation, Detroit, has been promoted to the newly-created office of assistant to the president, it has been announced by E. M. Doig, Hanna president.

F. JOLLIFFE

Jolliffe in 1937 joined Great Lakes Steel Corporation, like Hanna a division of National Steel Corporation, in the treasury department. He transferred to Hanna in 1955 as administrative assistant to the vice-president of sales.

During World War II, Jolliffe served in the U. S. Army, attaining the rank of major.

Bank of Livonia Pays 10% Stock Dividend

Directors of the Bank of Livonia have declared a ten per cent stock dividend, payable to stockholders of record on October 15, it is announced by Guy A. Spencer, president.

Spencer also revealed that the bank plans to offer 5,400 new shares of stock pro-rata to stockholders at $21 per share. The offer of the new stock expires in 30 days, he said. Prior to the ten per cent stock dividend, there were 27,000 shares outstanding.

Auto Industry's Wide Effect

(*Continued from Page* 11)

duction and sales will touch nearly every corner of the national economy. The manufacture, sale, service and commercial use of cars, trucks, and buses now involve more than 700,000 business enterprises and account for the gainful employment of more than 10 million people. More than 1,700,000 persons own stock in automobile and equipment manufacturing firms.

Directs Chrysler's Purchasing

Appointment of William C. Cawthon as general purchasing agent for Chrysler Corporation has been announced by B. W. Bogan, vice-president. In his new post, Cawthon will be in charge of all corporate buying operations and the company's relations with its 12,000 supplier concerns. Administrative service for the purchasing department will be the responsibility of E. Lloyd, director of purchasing administration.

Prior to his new assignment, Cawthon had been plant manager of the Plymouth Detroit Assembly Plant since February, 1959. He joined Chrysler Corporation in 1947 as a graduate student of the Chrysler Institute of Engineering.

After holding several important positions in engineering, Cawthon was named general superintendent of manufacturing at the Dodge Assembly Plant in 1956. In 1957, he was appointed general works manager at Dodge, and in 1958 was named plant manager at Dodge.

"THE TELEPHONE COMPANY HELPED US SPEED UP SERVICE... CUT DOWN COSTS"

Business was booming in the Detroit Office of the Encyclopaedia Britannica! In fact, their telephone service was unable to handle the work load. Mr. J. C. Chapman, Division Manager, called the telephone company for advice.

A Michigan Bell Communications Consultant studied Mr. Chapman's needs, and recommended that several CALL DIRECTOR telephones be installed. This new intercommunication system perfectly suits the needs of a large sales organization.

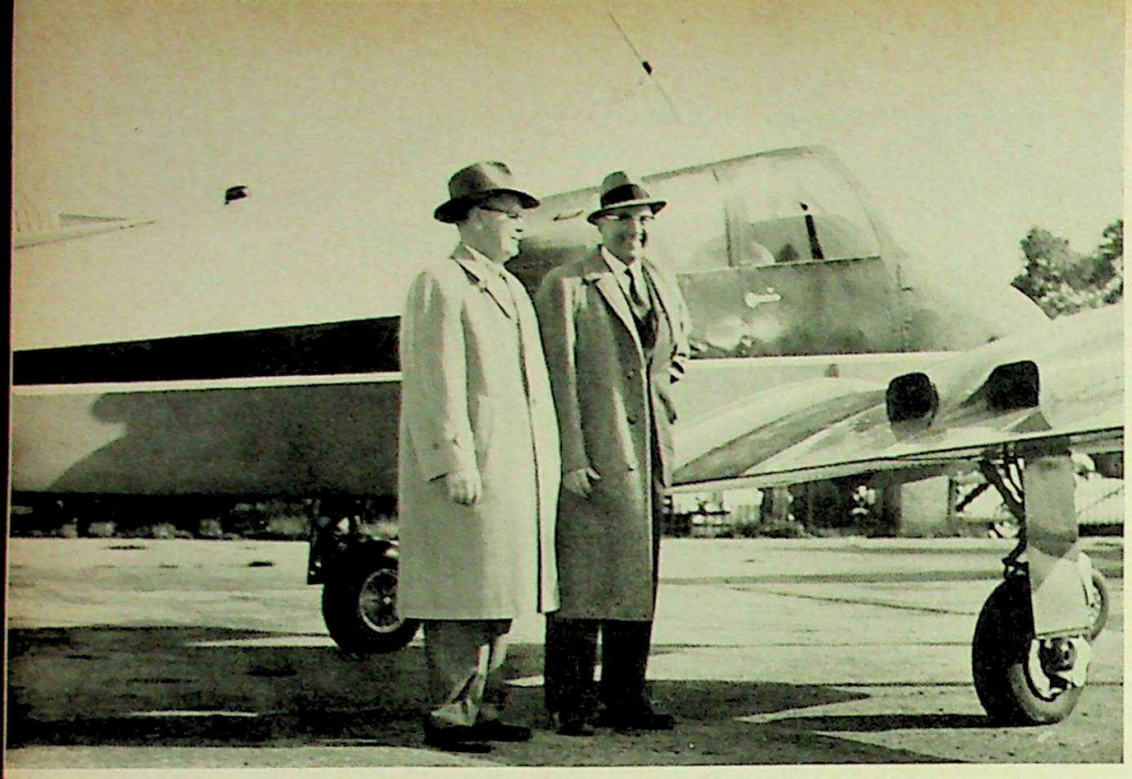
In a letter to our Communications Consultant, Mr. Chapman praised this modern telephone service, and added: "In these days of rapidly rising costs, we feel that it is incumbent upon us to cut costs in every way we can. Your recommendations have made a real contribution to our efforts in this line."

Are you getting the most from your telephone service?

Large and small businesses in *every* field have increased business or made savings by making more effective use of their telephone service.

Call your Service Representative at the Michigan Bell Business Office. She'll have a Communications Consultant show you how to make telephones serve you better. His services are free, of course, and without obligation.

MICHIGAN BELL TELEPHONE COMPANY



★ ★ ★

Proponents of the light airplane for business use are (left) Howard Maynard, whose Snyder Corporation (Detroit) uses its own plane primarily for engineering, service and sales work, and Robert L. Nulty, president of Great Lakes Automotive, Inc. Nulty's Willow Run firm flies Michigan businessmen some 150,000 miles yearly by charter service.

★ ★ ★

Airplane Use By Businessmen Soars

Industrial use of light airplanes by Michigan businesses and industries has increased tremendously since World War II and an even greater increase is in store, according to Robert L. Nulty, president and general manager of Great Lakes Airmotive, Inc., of Willow Run Airport.

Nulty's company sells Cessna aircraft, provides fueling and maintenance service for several airlines, commercial and private planes, and is one of the largest licensed charter flight services in Michigan.

Far Ahead Of Schedule

"The Curtis Commission forecast of 1955 indicated that nationally we would have 67,000 airplanes active in the general aviation fleet by 1960," Nulty says. "By January 1, 1959, this fleet already numbered more than 69,000, with less than ten per cent of the total represented by multi-engined craft. The general aviation fleet actually passed the predicted figure two full years ahead of schedule."

Michigan is one of the leading states in this increase, ranking fourth in rate of increase, both in number of sales and in dollar volume. New York, Illinois and Iowa are among the leaders, with Florida, California and Texas ranking high, partly as a natural result of better flying weather generally.

"A popular belief in metropolitan areas that the airlines own a big portion of the civil aircraft in operation in the United States is entirely erroneous," Nulty points out. "At the beginning of 1959, less than two per cent of the civil fleet registrations was airlines' planes. Even in the multi-engine class, the airlines run a poor second to the remainder of general aviation, with less than one fifth the number of planes in this category."

Fills Important Role

Another popular misconception is the reason for the rapid increase in the use of light planes by business and industry, both in charter service and company ownership. Executives do not buy airplanes solely for prestige nor strictly as tools to increase sales area potentials.

"You either believe in this thing or you don't," says Howard Maynard, president of Snyder Corporation, Detroit, manufacturer of special purpose machinery. "When we purchased our first airplane in 1953 we planned it as a tool to strengthen our business associations. It is not cheap transportation, but it fills an important position in our business picture—a spot for which there is no substitute.

"We started keeping records with the purchase of our first plane, a Cessna 195, and have kept accurate account of the cost of owning and using a plane, as well as what we have used it for," Maynard says. "From these records, no auditor could ever support any claim for the department as a low-cost operation, but what we have experienced in resulting benefits has proved that an airplane is a really important tool to us."

Maynard reports that engineering, service and sales account for more than 90 per cent of Snyder's use of the airplane. Executive usage, which once was regarded as a primary factor in the purchase of light planes for business, is less than 10 per cent.

Cites Typical Example

The Snyder airplane, now a Cessna 310C with cruising speed of 220 miles per hour, has been important in several areas —including customer relations, employe relations, service, and expansion of the scope of executive, supervisory, engineering and technical personnel.

"One of our customers recently moved from within taxi distance of our main offices to a small town in Kentucky, entirely off the beaten path and beyond the reach of any regular airline," Maynard says. "But, we continue to serve this customer because our salesmen are in contact, our engineers are available, service is prompt. It would be impossible without our own plane.

"Certainly this is important in both customer relations and employe relations: The customer gets service and the employe gets back home for dinner with his family. The goodwill engendered on both counts is impossible to translate into direct balance sheet terms."

A Common Practice

Some jobs do carry a dollar tag, according to Maynard. A machine breakdown in Syracuse recently was covered by the Cessna. Replacements parts were flown in, as well as engineers and skilled technicians to get the plant back in operation with a minimum of down time.

The intangible in this case involved management-staff relations. Though the job bridged a weekend, the Snyder crew was home for dinner Friday, stayed the weekend, and was back on the job in Syracuse Monday morning.

"Since we bought our first plane we have no difficulty in recruiting qualified personnel for distant jobs," Maynard says. "They know that we are doing everything possible to prevent their jobs from interfering with their home and family life."

Maynard said Snyder was the second or third company in the machine tool industry to invest in its own plane. "That was only six years ago and today every company has at least one."

Cessna Popular Choice

Nulty says three-quarters of the companies owning planes for business use have just one plane. More than half the business fleet is piloted by company executives, about one-quarter hire professional pilots, and quite a few others use both as pilots. More than four-fifths, however, use airlines and charter service in addition to their own planes.

Cessna is the most popular light plane for business flying, according to a recent survey, accounting for more than one-third of the new plane market.

Speed, range, economy of operation and number of seats are the most important characteristics considered by the pur-

(*Continued on Page* 91)

Pontiac Firm Keeps Pace With Changes

The American Forging & Socket Company, Pontiac, is a supplier of pressed metal stampings and assemblies for automobile and other manufacturers. Founded in 1915, it "grew up" with the auto industry.

R. B. STEWART

Today, the Pontiac firm's automotive products include seat backs, seat adjusters—manual and electric, including selective positioning, brake lever assemblies, hood locks, hood hinges, deck hinges, window guide assemblies, and other automobile and truck parts.

Robert B. Stewart, who has been affiliated with the company for the past 18 years, and became its president and general manager about a year ago, states:

Works With Customers

"Ability to design and manufacture, in keeping with the industry's requirements for annual model changes and functional improvements, is largely responsible for the company's progress. Our policy has been to work very closely with customers in developing assemblies to meet their specific original equipment needs.

"Recent achievements of our Engineering Division include a multiple-stroke parking brake lever assembly, and manually-operated, as well as electric selective-positioning seat adjusters."

The American Forging & Socket Company supplies all of the major automobile companies, and its close proximity to most of its customers offers many advantages. Present production for 1960 models includes assemblies for the new compact cars.

Explaining that the company's name became a misnomer quite a long time ago, Stewart said: "When the firm was organized over 44 years ago, it produced bow sockets, spare tire carrier arms, trunk rack arms, seat back supports, and other forgings common to the era of the soft top car. As these parts became obsolete, we discontinued the manufacture of forgings. Our name at present is not at all descriptive of the variety of pressed metal products which flow from our assembly lines."

BORMAN REPORTS GROWTH

Borman Food Stores, Inc., operators of Food Fair Markets of Michigan, is approaching the rate of sales which when annualized will be in excess of $100 million, stockholders have been told by Abraham Borman, board chairman, and Tom Borman, president. By the end of 1959, there should be 48 Food Fair Markets in operation as compared with 33 at the end of 1958, a growth of 45 per cent, they reported.

Plans $10 Million Apartments

Plans to build a $10 million apartment complex on the former E. D. Stair property at 8300 East Jefferson avenue, Detroit, have been announced by C. W. Babcock, Detroit builder. There will be 800 apartments and a yacht basin, Babcock said. He plans to begin construction of a model apartment on the four-acre tract immediately.

All apartments in the group will be co-operatives — meaning they will be purchased by the occupants, not rented. Some of these will be priced as high as $50,000, Babcock said. The luxury apartments will be in 14-story buildings, he explained.

The first group of 100 apartments, however, will be in the $12,000 to $15,000 price range. The first building, five stories high, will take at least two years to complete, Babcock said.

JOIN INVESTMENT FIRM

Manley, Bennett & Co., Detroit investment firm, announces the appointment of James C. Finney, Jr., Carl Johnson and Harry W. Summers as registered representatives on its Detroit staff.

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Detroit Steel's Sales On Uptrend

Detroit Steel Corporation, one of the few companies operating during the nationwide steel strike, reported sales for the September quarter of $25,235,972 against $15,350,741 for the similar period in 1958. Net earnings for the three-month period this year amounted to $2,120,414, equal to 69 cents per share on 3,018,343 common shares outstanding, as compared with earnings of $306,533, or eight cents a share, in the like 1958 period.

Sales Near $82 Million

Sales volume for the first nine months of 1959 amounted to $81,987,436, almost double the $42,194,346 reported for the similar period in 1958, and was 33 per cent more than sales for all of 1958. Earnings for the nine months this year were $7,712,648, equal to $2.52 per common share after preferred stock dividends. This compares with earnings of only $4,694 for the like period of 1958 before preferred stock dividends, or the equivalent of six cents loss per common share.

Although Detroit Steel operated throughout the third quarter, some production was unavoidably lost, explained M. J. Zivian, president. As a result, he said, sales volume and net earnings were off about 23 and 30 per cent, respectively, from the second quarter.

Shipped Out Stock

Zivian pointed out that the company's agreement with the Steel Workers Union was not signed until late in the day on July 14. By that time, shutdown operations at Portsmouth's basic steel plant were well along in anticipation of a strike the following day.

By that time, too, the plant had processed and shipped out virtually all stock of semi-finished and finished steel to help bolster customers' inventories. It took a week or ten days to reverse the shutdown procedures, and additional time to build up mill stocks before shipments in substantial volume could be resumed.

Production also was lost at the company's strip mills at Detroit and Hamden, Conn. Each of these plants was closed for two-week periods for annual maintenance and vacation programs during July and August.

Commenting on the current quarter's business, Zivian said that he expected marked improvement in sales and earnings over those reported for the June quarter this year. He estimated that earnings for the full year will reach approximately $3.75 a share.

The fourth quarter's business will be bolstered by anticipated earnings from rolling customers' semi-finished materials into sheet steel, made possible by the Portsmouth plant's excess of rolling capacity over ingot capacity.

Designs Special Truck For TV Star

"Horsepower for horses" were the primary specifications when TV star Dale Robertson requested a specially designed truck to pull his huge horse-trailer to location. The van normally carries 11 horses and large amounts of television and show gear.

Because he had a 1948 Reo on his ranch near Oklahoma City, and was pleased with its performance over the years, Robertson asked Reo officials in Lansing if they would design a special truck for his purposes. The request was accepted and the truck designed to his specifications.

Pictured above, left to right, looking over a truck similar to one Robertson will take delivery on, are: D. F. Gordon, account executive for Zimmer, Keller & Calvert, Inc., Detroit; George Collins, general sales manager for Reo; Robertson; and John Tooker, vice-president, The White Motor Co., Reo Division.

Auto Production
(Based on Ward's Reports)

For Week Ended 1959	Cars & Trucks U.S. & Canada	Same Week Year Ago	Same Week Record 1955
Sept. 26	119,137	61,253	144,534
Oct. 3	132,945	53,567	102,196
Oct. 10	148,239	51,964	130,778
Oct. 17	162,704	63,241	169,196
Oct. 24	139,981	90,410	188,283
Oct. 31	125,972	122,558	199,950

Total—Jan. 1 to Oct. 31, 1959—6,165,165 units.

Etkin Vice-President Dies

Funeral services were held in St. Mary's of Redford Church, Detroit, on Nov. 2 for Edward J. (Judd) Huyge, 64, vice-president in charge of estimating for the A. J. Etkin Construction Co., Oak Park, who died suddenly in his office on Oct. 31.

Born in Grand Rapids, Mr. Huyge was graduated from the Michigan College of Mining and Technology, Houghton. He joined the Etkin company about ten years ago. He was a member of the Engineering Society of Detroit.

PLANS NEW WELDER

National Electric Welding Machines Co., Bay City, reports it expects to reveal shortly a new automated strip welder capable of operating with a fast-moving strip mill tin plate coil inspection or annealing line.

NEW ARGUS SUBSIDIARY

Organization of Argus Cameras, Inc., as a wholly-owned subsidiary to market and distribute photographic and audio-visual equipment has been announced by Argus Cameras, of Ann Arbor, a division of Sylvania Electric Products, Inc. Sylvania is a subsidiary of General Telephone & Electronics Corp. J. J. Riggs, vice-president-marketing for Argus, is president of the new subsidiary.

53% Of GM 1959 Cars Power Steered

Use of power steering on General Motors cars reached an all-time high of 53.3 per cent on the 1959 models, according to W. H. Doerfner, general manager of the Saginaw Steering Gear Division, General Motors Corp., Saginaw.

The record percentage represents an increase of 10.4 per cent in the rate of power steering usage over 1958. It likewise reflects a tremendous increase in units produced because of GM's stepped-up car production this year.

Pontiac Sets Pace

The percentage of power steering usage by car makes in 1959 compared to 1958 is as follows:

Car Make	1958 Percentage Power Steered	1959 Percentage Power Steered
Cadillac	100.00	100.00
Oldsmobile	85.65	91.48
Buick	69.25	78.51
Pontiac	53.78	73.64
Chevrolet	25.46	29.22

Pontiac recorded the biggest gain in power steering usage with an increase of 36.9 per cent over 1958, Doerfner said.

Saginaw's new Rotary Valve power steering, introduced on the 1959 Cadillac, Buick, Oldsmobile and Pontiac, was built into 83.67 per cent of the total cars produced by those four GM divisions. This compares with 73 per cent of the 1958 models. These four divisions produced a total of 316,446 more 1959 passenger cars than they did in the 1958 model year. At the same time, a total of 338,844 more of their cars were equipped with power steering than in the previous model year.

Chevrolet, which uses the Saginaw Linkage Booster power steering system, built 219,297 more cars in 1959, and 112,671 of them were power steering equipped.

The use of power steering on GM cars has grown steadily since its introduction on the 1952 models. The percentages by years are:

Model Year	Percentage Power Steered
1952	7.0
1953	16.2
1954	24.6
1955	28.1
1956	30.0
1957	40.9
1958	48.2
1959	53.3

Mahon Gets Steel Contract For Saginaw Plant

A contract to furnish all structural steel for a new $3,000,000 building addition to the facilities of the Saginaw Steering Gear Division of General Motors, Saginaw, has been awarded to the Structural Steel Division of The R. C. Mahon Co., Detroit. The new building will be a one-story structure for expanding manufacturing operations of the Saginaw Division's Plant No. 4. It will represent the fifth major expansion in the last eight years for this GM division.

W. E. Willard, Mahon vice-president and general manager of the Structural Steel Division, said the contract calls for immediate fabrication, delivery and erection by mid-December of 1,350 tons of steel for a 236,000 square-foot addition. It is slated for completion by April, 1960.

Dodge Offers Truck Variety

(*Continued from Page 44*)

155 cubic feet of load space. Half-ton and three-quarter-ton Power Wagons are being offered for the first time with a Sweptline pick-up body.

Thirty stake and platform models are featured in nine basic categories from half-ton through two-ton.

Two forward-control chassis—the one-ton and 1½-ton—are available with 6 or 8-cylinder engines.

ELECTED BANK PRESIDENT

M. D. Watts, formerly executive vice-president and cashier of the Fremont State Bank, Fremont, has been elected president to succeed Harry D. Reber, who has been elevated to board chairman. Sydney Savage has been named cashier.

CHANGES CORPORATE NAME

Stockholders of Hapman Conveyors, Inc., Kalamazoo, have voted to change the company's name to Hapman Corp. They also approved an increase in authorized common stock from 500,000 to 2,000,000 shares. No sale of the newly authorized stock is contemplated at this time, it was announced.

40 Years of Food Services to the Automotive Industry

For more than four decades The Prophet Co. has numbered among its numerous and diversified organized food service operations, units in many of the automotive industry's most important plants—throughout the country—from coast to coast.

The above photograph shows the complete self-service area in a modernly equipped Prophet-operated cafeteria in a major automotive plant. In addition to operations as shown above, Prophet also provides organized food services for private and executive dining rooms, special affairs, banquets, picnics, mobile units, and complete vending operations.

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Food Management and Consultant Service

• On Michigan's Industrial Front •

Residents of Cadillac, Mich., area have pledged more the $50,000 to support a proposed move of the **American Ski and Specialties Co.** from Lyon, Ill., to Cadillac. The money was pledged by 265 persons in the form of stock purchases in the company. The firm produces snow and water skis.

★ ★ ★

Chrysler Corp. has leased the 48,000 square-foot Paramount Engineering Building at 32200 Stephenson Highway, Madison Heights, to house some of its engineering activities. About 350 persons will be employed at the new location. Paramount has transferred its operations to a new building at 32100 Stephenson Highway.

★ ★ ★

Completion of 60 service stations in the Detroit area, two district office buildings and a 5,000,000-gallon product pipeline terminal in Taylor township has climaxed a five-year expansion program by the **Clark Oil and Refining Co.**, of Milwaukee.

★ ★ ★

The Prophet Co., Detroit-based coast-to-coast food management and consultant firm, has acquired Terova's Rathskeller in the uptown section of Detroit. The company also has formed a new division to operate its public restaurant activities, to be known as Monte's Restaurant Division.

★ ★ ★

Brooks & Perkins, Inc., recently rolled its first slabs of magnesium alloy sheet and plate from Alamet high purity magnesium shipped to the Livonia rolling mill from Selma, Ala., where the magnesium is produced.

★ ★ ★

E. A. Garber, president of **Harbison Walker Refractories Co.**, has announced that the Ludington Division will be expanded with additional facilities for the production of dead burned magnesite. Construction of an addition has been started, and it is expected to be completed in 1960. The present plant at Ludington was completed in 1957.

★ ★ ★

G. Nicholas and L. N. Butler, co-owners of **Premium Engineering Co.**, announce the completion of their new plant at 30200 Stephenson Highway, Madison Heights. The firm specializes in providing design and engineering services for the automotive and aircraft industries.

★ ★ ★

Bernard L. Maas is president of the newly formed Detroit company, **Cold Forged Products, Inc.**, which will manufacture cold extruded products for the automotive and allied industries.

★ ★ ★

Kawneer Company, Niles, has announced the acquisition of the South Bend Screw Products, Inc., South Bend, Ind., manufacturer of precision machine parts for the aircraft, missile, automotive and appliance industries. The latter will be operated as a wholly-owned subsidiary of Kawneer.

★ ★ ★

Kelsey-Hayes Company has completed the purchase of the Navy Jet plant at Romulus from General Services Administration. Administrative, purchasing, sales, engineering and research and general office of K-H eventually will be moved to Romulus. Transfer of some operations from other plants also will be made.

Plymouth Industries, Inc., with main office near Detroit and a plant in Cheboygan, has announced that it will move its Boca Raton, Fla., plant to Cadillac, Mich. The Cadillac plant initially will employ 25 persons, and eventually about 100.

★ ★ ★

Anderson Chemical Co., of Weston, Mich., a division of Stauffer Chemical Co., has completed construction of a new plant unit for the commercial production of aluminum aspirin.

★ ★ ★

Paul Kelly, general manager, has announced the start of construction of **Sunset Marina**, a new 380-boat installation adjacent to the Champion ferry dock on Harsen's Island. It will face the North Channel of the St. Clair River near Algonac.

★ ★ ★

H. W. Rickel & Co., Detroit maltsters, has completed a new malting addition designed to convert about 500,000 bushels of barley into malt annually. The addition boosts the firm's malting capacity by 25 per cent.

Dow-Corning Plans $1,500,000 Silicon Plant

Dow-Corning Corp., Midland, has announced plans to build a $1,500,000 plant outside of Hemlock in Saginaw county. The new plant will be in operation next summer and will produce the world's purest silicons under a license from Westinghouse Corp., according to Dr. W. R. Collings, president.

The silicons will be used as crystals for transistors and rectifiers. Dow-Corning currently makes semi-pure silicons at its plants in Midland.

Dr. Collings said the new plant, with 30,000 square feet of floor space, will employ 40 to 50 persons in its initial operations. It will be located on a 557-acre site three miles east and a mile north of Hemlock. This is about 12 miles from the Dow-Corning Midland plants.

Detroit Edison Company on Oct. 1 fired up its new seven-story-high boiler as another step in the expansion of its Beacon Street Heating Plant in Detroit.

★ ★ ★

Ground has been broken at South Haven for a new factory for **Lovejoy Flexible Coupling Co.**, maker of universal joints and variable speed pulleys. It will employ about 25 persons when the plant opens next March.

★ ★ ★

Merger of **Ad Plate Engraving Co., Inc.**, and Mercury Engravers, Inc., both of Detroit, has been announced by David M. Riekse, president of the merged company, now known as Ad Plate Engraving Co., Inc.

★ ★ ★

Formsprag Company, Warren, has purchased the Rawson Division of the O. S. Walker Company, of Worcester, Mass., and has transferred its operation to Warren. Rawson manufactures a patented centrifugal clutch.

★ ★ ★

Kent-Moore Organization, Inc., Detroit, has acquired the major assets of Kleen-Air Manufacturing & Sales Corp., of Janesville, Wis. The Wisconsin firm will be operated as a wholly-owned subsidiary, Kleen-Air, Inc., to manufacture and market a line of truck-mounted vacuum furnace cleaners.

Purchase of the William F. Hielscher Wire and Iron Works, Detroit, by **Wire and Iron Products, Inc.**, also of Detroit, has been announced by Harry Gieseking, vice-president of the latter firm. The Hielscher company was organized at the turn of the century and pioneered in the industry's early developments in wire and metal specialties and materials handling products.

★ ★ ★

The former Mack Avenue plant in Detroit of Motor Products Corporation now is completely utilized by the operations of **Bond Steel & Storage Co.**, which acquired it last June, reports Ray Nigro, Motor Products president. Employment has been provided for about 100 persons, he said. The plant had been idle since Motor Products withdrew from auto parts manufacturing three years ago.

★ ★ ★

The Squirt-Detroit Bottling Co. has purchased the assets of Detroit-Nesbitt's Bottling Co., and will produce and distribute Nesbitt's orange soft drink in Wayne county.

★ ★ ★

Gar Wood Industries, Inc., Wayne, Mich., and Timberline Equipment Company, Bradley, Ill., have announced the establishment of a joint venture for the production and distribution of a new line of equipment for the forest products industry. Timberline is a subsidiary of Manco Manufacturing Co., of Bradley.

★ ★ ★

Rheem Manufacturing Co., New York, has agreed to acquire **Ruud Manufacturing Co.**, of Kalamazoo, for cash and Rheem stock equal to about $2,500,000. Both firms manufacture water heaters.

★ ★ ★

C. L. Mollhagen, president of **Ironrite, Inc.**, Mt. Clemens, reports that current production of home ironers is running at the rate of 110 daily. Early in October, the plant made a shipment of 906 ironers, the largest single shipment in its history.

★ ★ ★

Cadillac Plastic & Chemical Co., a division of Dayton Rubber Co., with plant in Warren, has purchased the plastic distribution business of Delta Products Co., Fort Worth, Texas, a division of Air Accessories Corp. Richard J. Jacob, Cadillac's executive vice-president, said the acquisition gives his company 15 sales-warehouse facilities in the nation.

★ ★ ★

Republic Gear Co., Detroit, has broken ground for the construction of a new $250,000 office and factory warehouse building at 20200 East Nine-Mile Road, St. Clair Shores. The 32,000 square-foot building will be completed in February, 1960, with warehouse facilities expected to be in operation by the end of December. The company makes and distributes automotive replacement parts.

★ ★ ★

Directors of **United Industrial Corp.**, Grand Rapids, and Topp Industries Corp., of California, have approved a plan for the merger of the two companies. It will be submitted to stockholders at November meetings.

★ ★ ★

Supreme Plating Co., Detroit, announces that Drew C. Haneline has purchased an interest in the company and has been made president and general manager. Haneline most recently was president of Federal Industries, Inc., Detroit, which he and others sold to Thompson-Ramo-Wooldridge, Inc.

★ ★ ★

Midland-Ross Corp. is negotiating to buy Surface Combustion Corp., of Toledo, for cash.

Ford Erects New Tractor Parts Depot

Plans to move the national parts depot of the Tractor and Implement Division, Ford Motor Company, from Lincoln Park to a new building on the company's 77-acre tract in Troy, Mich., have been revealed by Merritt D. Hill, general manager of the Tractor and Implement Division and Ford Motor vice-president.

This facility will be adjacent to the division's general offices and farm machinery research and engineering center at 2500 East Maple Road in Troy, a Detroit suburb. Approximately 200 persons will be employed initially at the new depot.

Steel Is Problem

Site preparation and construction of the new building will begin immediately, Hill said, but the completion date is indefinite because of problems in obtaining steel. "We hope we can occupy this new building by mid-1960," Hill stated.

According to Hill, the new building is needed to handle "substantially increased sales and a wider product line." The division's Tractor Parts Depot in Lincoln Park has become inadequate for present and future operations, he pointed out.

The new depot will not affect the operation of the division's implements parts warehouse at Des Moines, Iowa.

Office personnel from the parts and accessories department, who were located at Lincoln Park, have been transferred to the general offices in Troy. The warehouse personnel will be moved to the new depot as soon as its construction is completed.

The new building will measure 400 by 520 feet and will be of masonry and aluminum siding construction. A ground-level water storage tank, holding 250,000 gallons, will also be constructed.

The Division's site at Troy is served by the Grand Trunk Railway and a new spur will be built to the parts depot. Twelve truck and receiving and shipping docks also will be built to handle the substantial number of parts received and shipped by truck.

Equipped for receiving, packaging, storing and shipping of miscellaneous service parts and tractor accessory items, the facility will do no manufacturing.

Ad Agency Advances Hatch

F. J. HATCH

Election of Fred J. Hatch as a senior vice-president of MacManus, John & Adams, Inc., Bloomfield Hills, has been announced by Ernest A. Jones, MJA president.

Hatch, who has been a vice-president since 1950, heads the agency's Industrial and Commercial Accounts Group. He joined MJA in 1945 following a five-year Army service during which he attained the rank of colonel attached to General Staff Corps.

Hatch is a past secretary and member of the board of governors of the American Association of Advertising Agencies. He is a graduate of De LaSalle University.

FORD DECLARES EXTRA

Directors of the Ford Motor Company have declared an extra dividend of 60 cents a share, the first extra to be voted since the company became publicly owned in 1956. Also declared was the regular quarterly dividend of 60 cents a share. Both are payable Dec. 10 to stockholders of record on Nov. 10.

TRIPLES CAPITALIZATION

Commercial Acceptance Corporation, Detroit, until recently a family-owned concern, has tripled its capitalization through the public sale of stock, according to David J. Jassy, president. Established in 1934 by Jassy's father, the late Henry Jassy, the corporation is engaged in all forms of commercial financing. It also serves as an operating branch of the A. J. Armstrong Corporation, of New York.

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1960 Fords Completely New

(*Continued from Page 30*)

displacement and compression ratio of 8.4 to 1; the 185-horsepower, 282 cubic-inch V-8 with compression ratio of 8.8 to 1; the 235-horsepower, 352 cubic-inch V-8, with two-barrel carburetor and a compression ratio of 8.9 to 1; and the 300-horsepower, 352 cubic-inch power option V-8 with four-barrel carburetor and a compression ratio of 9.6 to 1.

All Ford engines incorporate an exclusive deep-block design for greater structural rigidity, wedge type combustion chambers with self cleaning spark plugs, aluminized valves, and advanced design ignition system, engine mounts and carburetion.

Completing the power train selection are two automatic transmissions and an improved synchromesh manual transmission, which also is available with overdrive. The 1960 two-speed Fordomatic provides better acceleration, smoother operation, and better engine braking qualities, and is available with any Ford engine. The dual-range Cruise-O-Matic is available with Ford V-8 engines.

Equa-Lock Differential

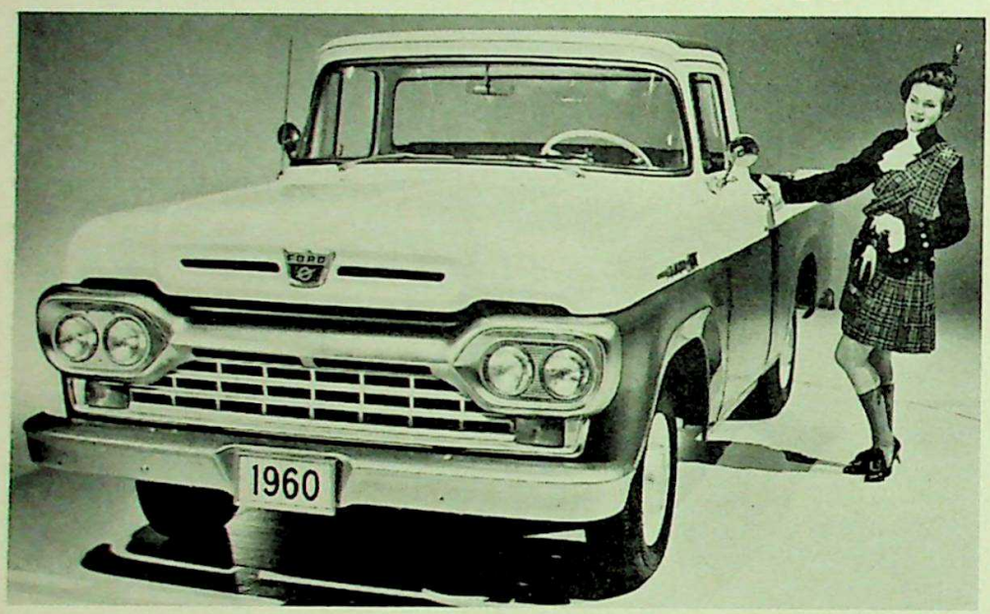
For positive traction when driving under conditions of poor footing, such as ice, snow or mud, the 1960 Ford-designed Equa-Lock differential is available as optional equipment.

An extended life aluminized muffler that utilizes aluminum-coated walls and heads, a double-thick inner casing and asbestos insulation to slow the condensation rate, reduces corrosion and lengthens muffler life. Mufflers, of a new cylindrical shape, are located behind the rear wheels.

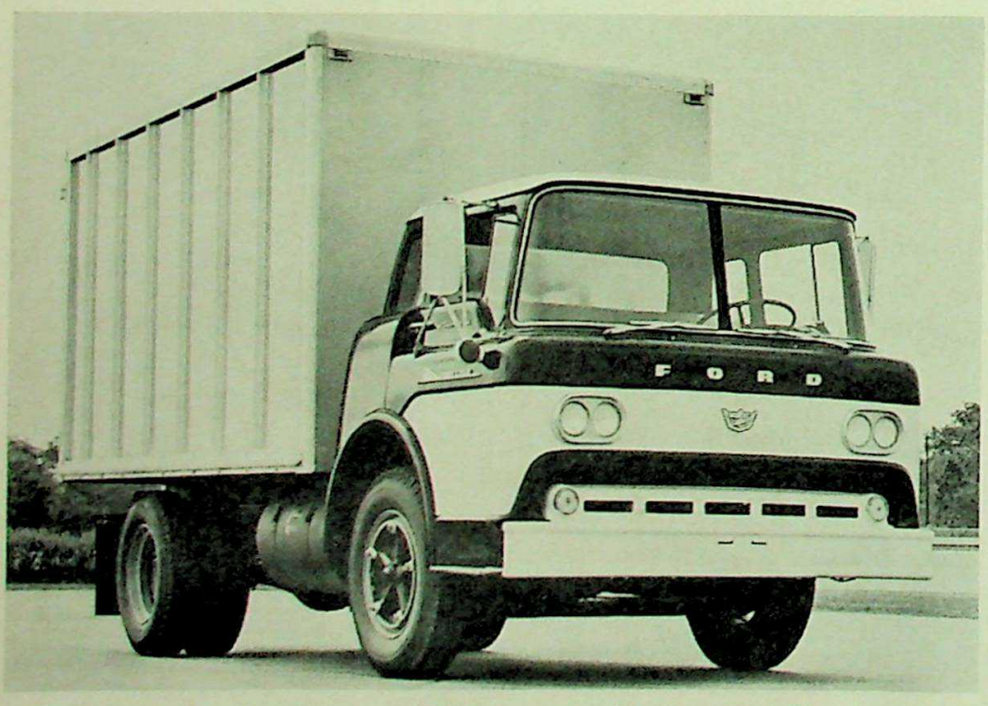
For longer battery life, the 1960 Ford has a standard battery with 66 plates instead of the usual 54.

Diamond Lustre finish, a super enamel that requires no waxing, is available in a wide selection of solid and two-tone exterior colors, color-keyed to match the interior upholstry trim.

480 Ford Trucks Available In 1960



The popular F-100 pickup is one of more than 480 Ford truck models available in 1960. Dual headlights and the new Ford crest on the hood are standard features on the pickup models. (More details and pictures of the 1960 Ford truck line were carried in the October issue.)



Ford's 1960 tilt-cab series is available in a complete line of medium, heavy and extra-heavy models with both single and tandem axle chassis.

Ford Adds Two Lower Priced Models

Ford Division of Ford Motor Company in mid-October announced two new models which are priced $25 under the Fairlane, the previous lowest priced series of conventional Fords for 1960. J. O. Wright, Ford Motor vice-president and division general manager, said that these Custom 300 models are available in two and four-door sedan body styles and with either six or eight-cylinder engines.

The factory suggested list price of the Custom 300 two-door, six-cylinder model is $2,026 and the four-door sedan is $2,076. The prices for the comparable Fairlane models are $2,051 and $2,101.

Previously, Chevrolet had announced two similar lower-priced models in its Biscayne series with identical factory list prices as the two added Fords.

Approves Channel Deepening

Army Board of Engineers, Washington, has approved an $8,570,000 Federal project to widen and deepen Detroit River channels off Wyandotte and Trenton. The approval was given to a program suggested in August by the District Corps of Engineers in Detroit.

A 5½-mile section of the Trenton channel, down to the Grosse Ile bridge, would be deepened to 27 feet and widened to 300 feet. An additional 6,000-foot section would be dredged to 28 feet, and would include a 15-acre turning basin.

Local interests are expected to meet conditions that require a $2,000,000 deepening of dock and berthing areas to match the depths of the Federal project.

T-Bird Offers Power Options

(*Continued from Page 62*)

lid, lifts the top into place, and closes the deck lid.

Available with the 1960 Thunderbird is a full range of power assists—steering, brakes, seats and windows—and other optional equipment, including air conditioning.

ACQUIRES FOUR ACCOUNTS

Acquisition of four new advertising accounts, and resignation of a fifth, has been announced by R. F. LaRue, president of LaRue, Cleveland, Inc., Detroit advertising agency. The new accounts are: American Coldset Corp., of Teterboro, N. J.; the Pontiac Press; Michigan Oven Co., Detroit; and Master Pneumatics, Inc., Detroit. The resigned account is that of General Electric Company's Metallurgical Products Department, Detroit.

AC's Replacement Sales Set Records

AC Spark Plug Division of General Motors set an all-time model year sales record for replacement products, principally spark plugs, oil filters and fuel pumps, in the 12 months ended Sept. 30, 1959, acording to Joseph A. Anderson, GM vice-president and AC general manager. Replacement sales for the 1959 model period were about 11 per cent over 1958, the best previous year, Anderson said.

Amplifying the sales totals, E. H. Francois, AC general sales manager, noted that September was the best single replacement business month in AC's 51-year history. September sales were 14 per cent higher than the best previous month, December, 1958, and 22 per cent above the same month in 1958, Francois said.

Pointing out that the September replacement product shipments actually would fill 425 trailer truck loads for a total of 8,500,000 pounds, Francois explained that spark plug sales for the month were about 21 per cent higher than a year ago, oil filter sales were up 35 per cent, and fuel pumps up 29 per cent.

In addition to spark plugs, oil filters and fuel pumps, AC replacement products include air cleaners, radiator and gas tank caps, speedometer cables and flexible shafts, Guide lamps, valve lifters and other accessories.

Replacement products are sold in what the automotive trade calls the "after-market." This market includes, for example, the person who buys a set of spark plugs or an oil filter from a service station.

AC replacement products reach the consumer through a nationwide system of distributors, car manufacturers and jobbers. These in turn, distribute the products to retail outlets such as service stations, garages and automotive dealers.

Agency Appoints Vice-Presidents

Appointment of two vice-presidents, both located in the Detroit office, has been announced by George H. Gribbin, president of Young & Rubicam, Inc., national advertising agency. They are Joseph G. Standart, Jr., and Jerome G. Darrow.

Standart will continue as supervisor of the Chrysler and Imperial advertising account. He joined Young & Rubicam in Detroit in 1958 after two years as president of his own organization. Previously, he had served for five years with Kenyon & Eckhardt and 13 years with MacManus, John & Adams. He is a native of Detroit.

STANDART

DARROW

Darrow will continue as executive copy director for all Detroit accounts. He joined the agency in 1948 as a copy writer in Detroit and five years later was transferred to the firm's New York office as a senior writer. In 1957, he was promoted to associate copy director in New York, and returned to the Detroit office last year as executive copy director. He is a native of Ironwood.

AYER TO MOVE OFFICES

Removal of its Detroit offices from the Penobscot Building to the First National Building soon after Jan. 1, 1960, has been announced by N. W. Ayer & Son, Inc. Richard T. O'Reilly, vice-president in charge of the agency's Detroit office, said the new offices will occupy half of the sixth floor of the First National Building.

PLYMOUTH PUBLISHES MAGAZINE

A new consumer magazine, the first in Plymouth's 31-year history, made its debut with the announcement of the 1960 models. The Plymouth "Traveler", a monthly 24-page publication, will be distributed through Plymouth dealerships. Circulation is expected to exceed a million by January 1, according to Louis T. Hagopian, Plymouth director of advertising and sales promotion.

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BROCHURE UPON REQUEST

Bank Dedication Features "Money Tree"

First public presentation of the "money tree" took place during the dedication on November 9th of Manufacturers National Bank of Detroit's new office at 16150 Michigan avenue, just across from Dearborn's Civic Center.

Dearborn officials, civic leaders and bank officers took part in the ceremonies with Mayor Orville L. Hubbard, of Dearborn, reading his proclamation setting the week of Nov. 8-14 as "Manufacturers National Bank Week in Dearborn." Also taking part in the dedication were the Rev. Russell H. McConnell, pastor of Greenfield Congregational Church of Dearborn, and Father Gerard S. Brennan, pastor of St. Joseph's Catholic Church.

"Money Tree" Displayed

William A. Mayberry, chairman of the board, Arthur J. Fushman, president, and William O. Pfeiffer, vice-president and officer in charge of the new office, spoke for the bank.

The "money tree" is a contemporary abstract mural of lacquered steel with aluminum leaves and lucite discs filled with coins. Theme of the "money tree" is that thrift and money management bear fruit.

Approximately 22 feet long and 7 feet high, the "money tree" is suspended two inches from the wall behind the ten tellers' windows. "Fruit" of the "money tree" consists of 17 clear lucite discs filled with hundreds of dollars worth of coins from the United States and foreign countries. W. B. Ford Design Associates, Inc., designed the "tree." The coins were secured through the J. L. Hudson Company's coin department.

The new bank office, which replaces the Michigan-Curtis office, is just east of the Ford Motor Company's Central Staff office building on The American Road. It will be known as the Michigan Avenue-The American Road office. Of contemporary design, the one-story building contains 10,700 square feet, is completely air-conditioned, and makes liberal use of glass, aluminum, and stainless steel.

The newly-constructed Michigan Avenue-The American Road office of the Manufacturers National Bank, located in Dearborn, is a fine example of today's trend in bank architecture. The one-story building contains 10,700 square feet and makes liberal use of glass, aluminum and stainless steel. Four drive-up banking windows, a 177-car paved parking lot, and safe deposit boxes are among the facilities of the new office.

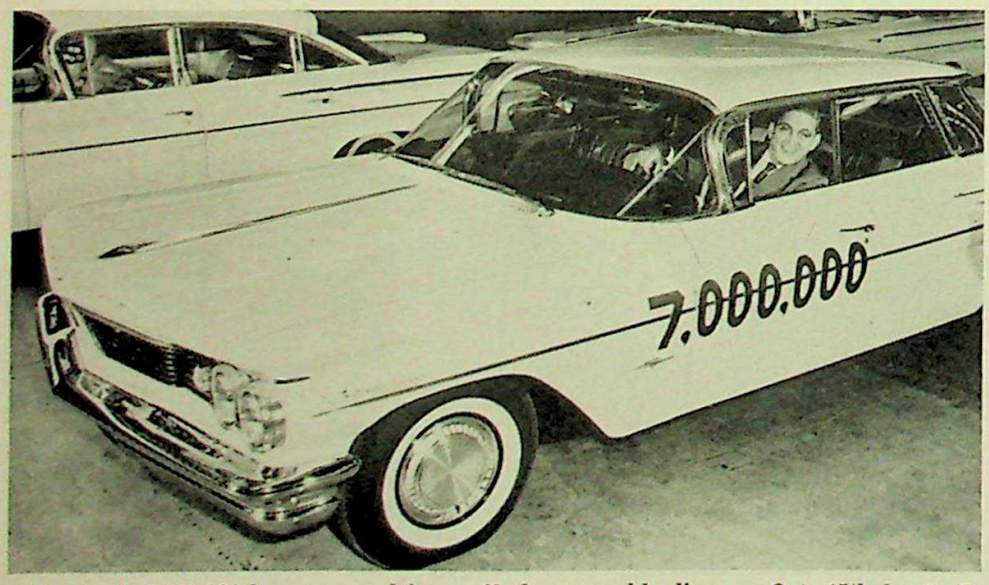
Ample Parking Facilities

Four drive-up banking windows, a 177-car paved parking lot, and safe deposit boxes are among the facilities of the new bank.

Situated on 3⅓ acres, the new office has 300 feet of frontage on Michigan avenue. The building provides a customer lounge and conference room, as well as an employe lounge and lunch room in the basement level.

Giffels and Rossetti, Detroit, were the architects and engineers; Bryant and Detwiler Co., Detroit, the general contractors; and W. B. Ford Design Associates, Inc., the interior designers.

Pontiac Produces Its 7,000,000th Car



Pontiac's 7,000,000th car was driven off the assembly line on Oct. 15th by S. E. Knudsen, GM vice-president and general manager of the Pontiac Motor Division. It was a 1960 Bonneville Vista hardtop.

Strike Cuts McLouth's Earnings

Effects of the steel strike on the operations of the McLouth Steel Corporation are seen in the third quarter report which showed net sales of only $6,213,221 as compared with $47,926,610 in the same quarter of 1958. The company had a third quarter loss of $3,193,566 after federal income tax credit of $4,810,000. This compares with earnings of $2,766,781, or $1.39 a share, during the third quarter of 1958.

For the first nine months of 1959, net sales were $135,101,878 as compared with $112,423,739 in the like 1958 period. Net earnings for the nine months this year were $7,463,567, equivalent after preferred dividends to $3.93 a share on the 1,722,227 common shares now outstanding. This compares with net earnings of $5,083,618, or $2.25 a share, in the like 1958 period.

"When work is resumed, we will immediately prepare our facilities for operation and we expect to be at near capacity production within two or three weeks," pointed out M. A. Cudlip, president and treasurer.

MONROE SCHOOL APPROVED

Voters of the Mason Consolidated School District have approved five proposals that will bring a new $2,250,000 high school to the southern Monroe County area near Erie.

TARLETON IN NEW POST

Lawrence C. Tarleton has been named national distribution manager on the staff of Edward P. Letscher, general sales manager of the Plymouth-De Soto-Valiant Division of Chrysler Corp.

17 New Industries Locate In State

Seventeen companies on the Michigan Economic Development Department's list of prospective new industries for Michigan, located plants in the state during the first nine months of 1959, the Department has reported to the Michigan Economic Development Commission.

The report pointed out that the Department was the prime mover in getting eight of the new plants for Michigan and assisted local communities and other agencies in acquiring eight more. The other was obtained largely through the efforts of one of the Michigan Industrial Ambassador Corps.

Will Continue Program

At the first of the year, 46 prospects were on the Department's list. Of these, 11 came to Michigan, 22 located elsewhere or abandoned expansion and moving plans. Another 13 still are on the prospect list. Some of the prospects were Michigan firms planning expansion, but most of them were from other states, the report said.

During the first nine months of this year, 61 prospects were activated. Of these, six came to Michigan, five went to other states, and the Department is working on the other 50 prospects.

William M. Day, president of Michigan Bell Telephone Company and chairman of the state commission, said the results shown by the Department in its program to obtain new industries for Michigan "are encouraging and we intend to keep this program moving forward as rapidly as possible."

Of the 27 prospects which abandoned consideration of Michigan as a site for their new plants, ten decided to withhold expansion plans for the present, four expanded on present property, four went out of business, six went to other states, one from Michigan expanded by buying another Michigan firm, one has delayed expansion, and no information is available on the other.

Cooperates With Communities

In its report, the Department stressed its close cooperation with local industrial development organizations, Chambers of Commerce, and companies having their own industrial development organizations.

Department representatives in the first nine months made 1,360 calls on 528 communities, emphasizing that cities which seek to attract industry need up-to-date industrial surveys, local industrial development corporations, planned industrial sites, and the know-how to work with industrial prospects.

So far in 1959, seven communities have formed industrial development corporations, raising to an even 100 the number which are prepared to offer financial assistance to help acquire new industries for their communities. At the end of September, 39 Michigan communities had established or were ready to establish planned industrial sites with facilities that would be desired by a new plant which might locate in these places.

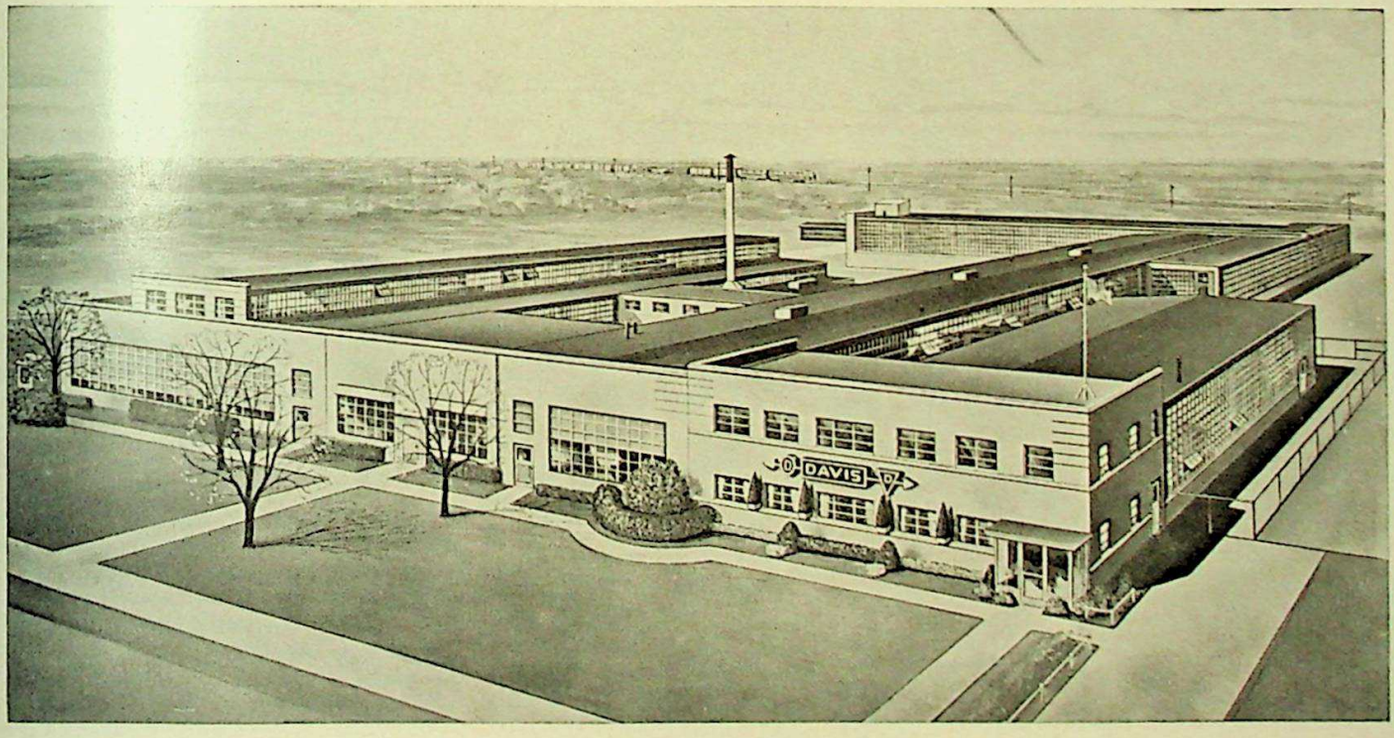
U. P. Gas Service Nears

The report also disclosed that the Department has worked closely with the Upper Peninsula Industrial Development Commission in efforts to obtain natural gas, improved port facilities and better highways for the Upper Peninsula, and also to increase plane service between the state's two peninsulas.

Natural gas service is expected to be available to the residents of the Upper Peninsula in 1961, the Department has been advised, and only recently it was announced the CAA had approved new air schedules and improved air service between the two peninsulas.

TO BUY BATTLE CREEK FIRM

Debco Corp., Chicago holding company, has offered to buy all stock in the United Steel & Wire Company, of Battle Creek, at $7.50 a share for the outstanding 200,000 shares. Lowell B. Genebach, United Steel president, said Debco could withdraw the offer unless 80 per cent of the United Steel shares were accepted by Dec. 4.



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Cast Aluminum Muffler Nears Reality

The auto industry's dream of a muffler that will outlast today's and tomorrow's cars will be a reality before year's end if progress on a cast aluminum muffler reported by Centr-O-Cast and Engineering Company and Reynolds Metals Company continues as scheduled.

The muffler, designed to eliminate need for replacement and dual exhaust systems, is competitive in cost and will reach the market weighing only 60 per cent as much as present mufflers, according to L. W. Wickson, president of Centr-O-Cast.

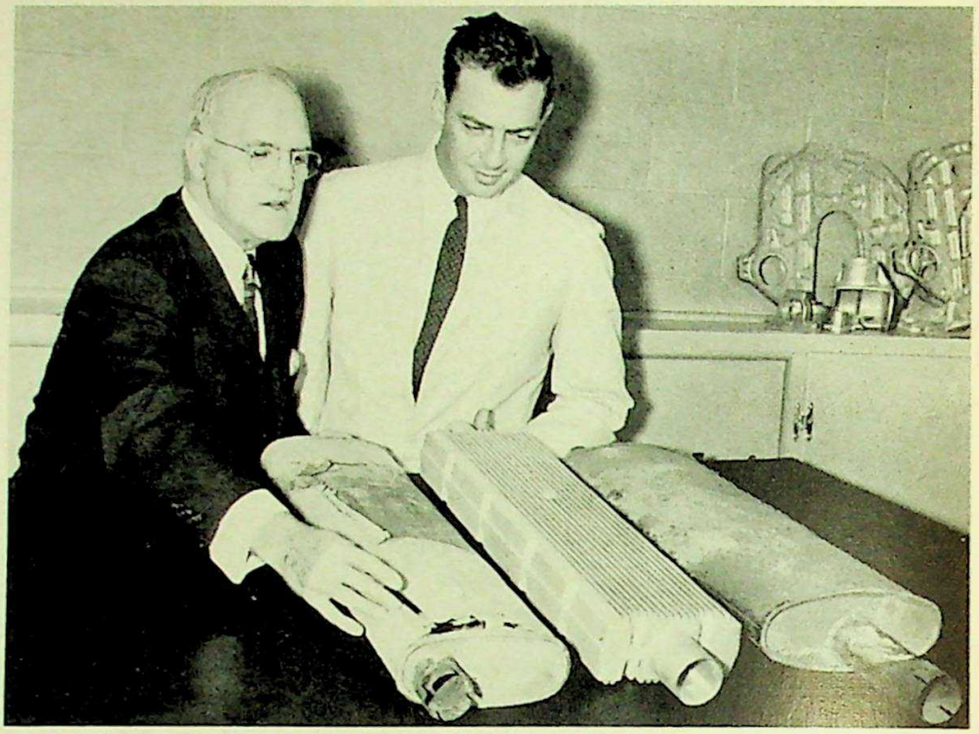
Balanced Heat Distribution

Currently, the average corrosion rate of new passenger car mufflers gives them a useful life of less than two years. At this rate, the immediate market for the aluminum mufflers, if universally adopted for replacement alone, would add a half-billion pounds to the aluminum now required by automobiles.

J. Donald Shircliff, Reynolds' automotive sales manager, said the muffler is designed to take advantage of thermal and casting qualities found only in aluminum, and for the first time achieves balanced heat distribution under all passenger car operating conditions. This virtually eliminates corrosion from within, he said.

Present steel mufflers, attacked from the outside by rust and street clearing materials, are even more vulnerable from within because of condensation of corrosive vapors in exhaust gases, Wickson pointed out.

Aluminum mufflers eliminate most of the external damaging factors because of aluminum's natural freedom from rust and resistance to corrosion, he said. Internal corrosion, he explained, is prevented in an aluminum muffler by minimizing condensation. This is achieved by fast warmup when the engine is started (about seven times faster than possible with steel) and controlled heat distribution achieved by variations in wall thickness, economically possible only in cast aluminum.



The muffler in the middle of the three being compared after equal road testing periods may end the problem of having to replace mufflers on the average of less than every two years. This new cast aluminum muffler is expected to reach the market before the end of 1959.

Left is L. W. Wickson, president of Centr-O-Cast Engineering Company of Detroit, and J. Donald Shircliff, automotive sales manager of Reynolds Metals Company. Reynolds is credited by Wickson with technical assistance and encouragement required to bring the muffler to the production stage.

Aluminum's ability to transfer heat quickly, Wickson stated, provides the same favorable service in evaporating condensation by uniform cooling, even after the car is stopped, further aided by the finned design which runs the length of the muffler. The fins also protect the muffler from road and stone damage, he said.

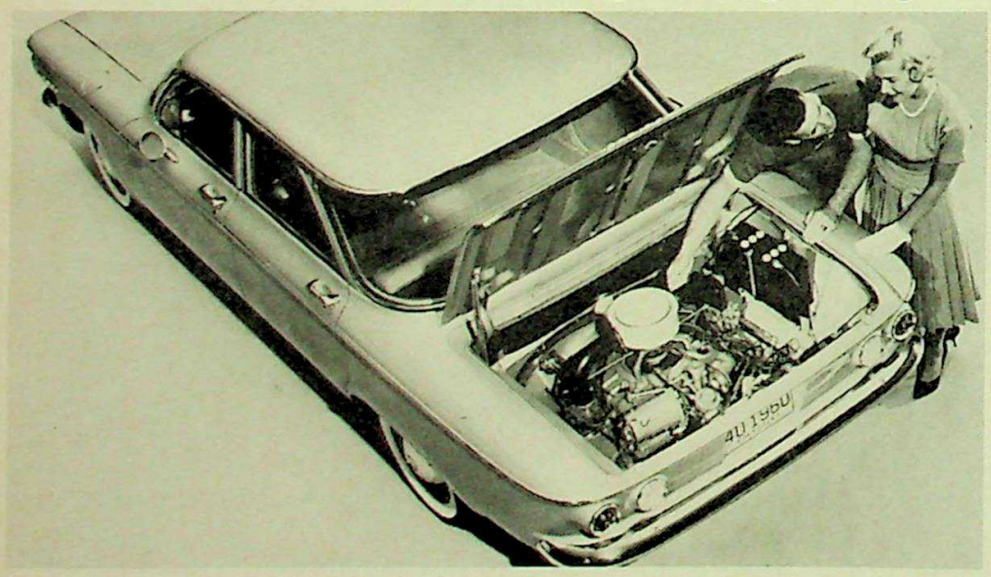
Proven In Road Tests

In test track and road performance tests, Wickson said that even at sustained speeds of 100 miles per hour and more, maximum heat recorded was at least 300 degrees less than that which could affect the performance of the cast aluminum muffler.

In these tests, the maximum heat achieved at 110 miles per hour was 785 degrees, compared to 1,200 degrees experienced in steel mufflers. At average driving speeds, temperatures ranged between 350 and 425 degrees with dramatic drops in temperature paralleling the use of the accelerator.

In stop-and-go city traffic, where most muffler damage occurs, aluminum's ability to heat quickly is an important safeguard against internal corrosion, Wickson said, especially in view of statistics establishing short hauls as accounting for most of the mileage driven by the average motorist.

Corvair's Rear-Mounted Lightweight Engine



Positioning of its lightweight aluminum air-cooled engine at the rear of the new Chevrolet Corvair offers many benefits. Fore and aft weight distribution remains nearly the same under all conditions, maintaining the riding, handling and braking quality at all loads. Traction, braking and steering are improved. Engine noise is reduced and is behind the passengers. (Complete details and an exterior photo of the new car appeared in the October issue.)

Harry Larsen has been promoted by National Bank of Detroit from assistant vice-president to vice-president, and **Keith O. Millar** and **Lester O. MacIsaac** have been elected cashiers.

Ford Names Two New Vice-Presidents

John S. Bugas, vice-president-international group and vice-president-industrial relations, Ford Motor Company, will relinquish his industrial relations responsibilities to devote full time to work with the company's foreign affiliates, it was announced in mid-October by Henry Ford II, president.

J. S. BUGAS

"The great importance of the company's manufacturing and sales activities abroad and the potential for growth in foreign markets require that Mr. Bugas be in a position to give full-time direction to this phase of our operations," Ford said.

At the same time, Ford directors elected two new vice-presidents. Kenneth D. Cassidy was named vice-president-industrial relations, succeeding Bugas in that capacity, and Malcolm L. Denise was named vice-president-labor relations, reporting to Cassidy.

Cassidy formerly was group director-body group. Denise has been general industrial relations manager, labor relations.

Head of Ford industrial relations since September, 1945, Bugas assumed the added duties of vice-president-international group in May, 1957. In this capacity, he will direct the company's growing import and export operations and oversee its relations with overseas branches, subsidiaries and associated companies. Bugas is a member of the Ford board of directors, the executive committee and the administration committee.

K. D. CASSIDY

M. L. DENISE

Cassidy joined Ford Motor Company in 1946 as a supervisor in the controller's office and served as a divisional controller and as general manager of the Manufacturing Services and Steel Divisions before becoming group-director-general products in October, 1956.

In April, 1958, he was appointed group director-body group, serving as general assistant to the vice-president-body group in supervising activities of the Metal Stamping, Hardware and Accessories, Steel and Glass Divisions and manufacturing services activities.

Cassidy is a native of Detroit and holds bachelor of arts and bachelor of laws degrees from the University of Detroit. He lives in Royal Oak.

On Negotiating Team

Denise has been a key member of Ford's Industrial Relations Staff and national negotiating team since joining the company as associate counsel-industrial relations in 1946. Prior to that he worked with Ford as a member of a legal firm specializing in labor and industrial relations law. He was named general industrial relations manager, labor relations, in June, 1955.

Denise was born in Decatur, Mich., and received bachelor of arts and doctor of jurisprudence degrees from the University of Michigan in 1937 after a six-year combined course. He began his law career the same year as an associate of the Detroit firm of Lucking, Van Auken and Sprague. He lives in Grosse Pointe Park.

AEROQUIP PAYS DIVIDEND

Directors of Aeroquip Corp., Jackson, have voted the regular quarterly dividend of 10 cents a share on the 1,194,135 common shares, payable Dec. 1 to stockholders of record on Nov. 13.

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PONTIAC 19, MICHIGAN

Suppliers to Automotive and Related Industries

Founded in 1915 — The firm's name has become a misnomer. The manufacture of forgings and sockets has been discontinued. The company now supplies the automotive and related industries with pressed metal stampings and assemblies.

Auto Equipment Firm In New Home

Rim & Wheel Service Co., Detroit, pioneers in the automotive equipment business, has announced the completion and occupancy of its new building facilities at 1401 Howard at Eighth Street. For the past 32 years the company had been located on Third Street.

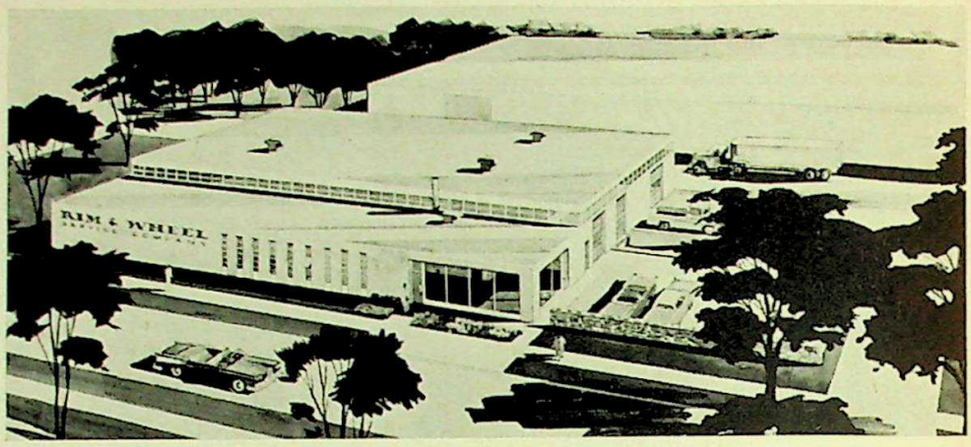
The company was the purchaser of the first piece of reclaimed property sold in the West Side Redevelopment Area, known for many years as "Old Corktown". The site was purchased last July from the City of Detroit, and construction of the new facilities was started immediately thereafter.

Provides Ample Parking

The new home of the company—the first building to be erected in this Redevelopment Project—is a one-story office and warehouse building, providing more than 16,000 square feet. Ample parking, receiving and shipping conveniences are available in a paved, 8,000 square-foot parking area.

An outgrowth of the partnership of Carney, Labadie & Co., established in Detroit in 1911, Rim & Wheel Service Co. was incorporated in 1928. Its officers are: Lee F. Carney, president; Arthur B. Carney, Sr., vice-president and treasurer; and Arthur B. Carney, Jr., secretary and sales manager.

Business of the firm consists principally of the warehousing and distribution of specialized automotive equipment such as wheels, rims, brake drums, brakes, for cars, trucks, trailers and agricultural implements.



Drawing of the modern office and warehouse building recently occupied by Rim & Wheel Service Co., Detroit, at 1401 Howard Street at Eighth Street.

It is the authorized warehouse distributor in Michigan for Kelsey-Hayes Co., Detroit; Motor Wheel Corp., Lansing; Firestone Steel Products Co., Akron, Ohio, and Wyandotte; Dayton Steel Foundry Co., Dayton; Wagner Electric Corp., St. Louis; American Steel Foundries, Chicago; Prior Products, Inc., Dallas; and other manufacturers.

Detroit Diesel Boosts Sales Officials

Robert E. Hunter, general sales manager, Detroit Diesel Engine Division, General Motors Corporation, announces the appointments of Lauren H. Wells as assistant general sales manager in charge of the home office staff activities, and Raymond F. Prussing as assistant general sales manager in charge of field activities. Both of these are new positions required because of the Division's expanded Diesel engine volume.

Wells formerly served as manager of sales engineering, and Prussing was executive assistant to the managing director of Foreign Distributors Division, General Motors Overseas Operations, in New York.

Wells, who attended the University of Wisconsin and Wayne State University, joined General Motors in 1937 in the Diesel engine design group of GM research. Later with the newly formed Detroit Diesel Engine Division, he served in various engineering department positions, transferring to the sales department in 1945. He became head of sales engineering in 1955.

L. H. WELLS

R. F. PRUSSING

Prussing started his business career as a GMC truck distributor. After service during World War II in the U.S. Air Force in England, he joined the Foreign Distributors Division of General Motors Overseas Operation.

Edmond T. Duffy has been appointed as director of replacement sales for The Electric Autolite Co., Toledo.

CAPITAL GAINS AND LOSSES

Our 23-page booklet will help you prepare your 1959 income tax return. It contains a program for tax saving, and work sheets for computation.

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Light Airplane Use Grows

(*Continued from Page 78*)

chaser of a business-type plane, but he is swayed by the reputation of the manufacturer, past experience or the recommendation of a pilot.

The large corporations have operated their own fleets for years, but now the smaller companies are becoming air-minded.

An Owosso manufacturer became the owner of a Cessna 310 recently when his usual source of charter or rental plane service was booked solid just as an emergency arose. The regular airlines could provide no help. This executive had been considering the purchase of a plane for some time but had never made a decision. The emergency made the decision for him.

Serves 100 State Firms

"We owe the existence of the charter part of our business," says Nulty, "to the executive who has not yet made a decision to purchase a plane of his own. Before 1955 we frequently carried these men on business trips as part of our demonstrations. But the trips became so frequent and so popular that we were practically forced into the chartering and plane rental business."

The charter and rental operation of Great Lakes now serves some 100 Michigan industrial and business firms all over the state, flying upwards of 150,000 miles annually on charter alone. With seven single and twin-engine Cessnas in use, Great Lakes is one of fewer than a half dozen major charter and rental plane services in the Greater Detroit area.

It is this phase of the operation that proves the light airplane has a multitude of uses and applications. Whether passenger or freight, time is the important element that makes the airplane indispensable.

Develops Resort Business

A rush call came from Mackinac Island this spring when that popular northern resort ran out of coffee. "Fly it up!" came the message and 300 pounds of coffee arrived in time for breakfast.

Some of the "cargo" has more interesting statistics—such as the 39-23-36 description of Miss Denmark of 1954, Greta Tysson, who flew from Traverse City to Bellaire in a Great Lakes Airmotive plane this summer take part in the annual Cherry Festival.

Passage to Pelee Island in Lake Erie for eight men and two dogs was booked ahead of the opening of the pheasant hunting season.

Some of the more common uses of the light plane by business and industry include aerial survey and reconnaissance, key personnel transportation and business-related pleasure, often chargeable as a sales division expense.

Plant Sites From Sky

At least two of Greater Detroit's major shopping centers had their beginnings "up in the air" where planners could take an overall look at the proposed site.

One Michigan manufacturer decided to build a new plant and was able to make a final selection of a site in one day by taking a look at several proposed locations from the air. Later aerial surveys enabled engineers to make most efficient use of the property, taking full advantage of topographical features revealed from the air. Rail, water and highway facilities, as well as the general topography, can be studied much better from the air.

Inventories of outside stocks of bulk materials frequently are made from the air, often to avoid surface obstructions that would make such data impossible to obtain otherwise. One major Michigan corporation uses the aerial method of inventorying all its coal, sand, stone and ore stocks throughout the state. Its engineers report this system has proven more accurate than ground level inventories that took longer, cost more.

Three Named To Supervise Dow Account

Appointment of three supervisory executives to the agency's Dow Chemical Company account staff was announced recently by Robert L. Garrison, senior vice-president of MacManus, John & Adams, Inc., Bloomfield Hills, national advertising agency.

J. B. CALDWELL

The appointees are John B. Caldwell, who will be responsible for the agency operations on all segments of the Dow account with the exception of retail products; Richard P. Monley, now supervisor of Dow retail accounts; and Joseph L. Hardig, account supervisor in charge of planning and preparation for the introduction of new products.

R. P. MONLEY

J. L. HARDIG

Caldwell is a marketing expert with broad chemical experience. He has been a vice-president of the Merchants Chemical Co. New York; headed his own chemical company for five years; and has served as a marketing consultant.

Monley joined the agency in 1950 in the traffic department, and has been a copywriter and account executive. Hardig joined MJA in 1953 in the production department, and has been engaged almost exclusively on the Dow account.

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WASHINGTON, PA.

MONROE, MICHIGAN

ACilloscope Speeds Spark Plug Check

A new electronic device that permits motorists to check spark plug efficiency in minutes is announced by AC Spark Plug Division of General Motors Corporation, Flint.

AC engineers report that the instrument — called ACilloscope — is the only one of its kind that will detect lead fouling, the cause of 85 per cent of spark plug failures. In addition, the device reveals electrode wear, oil and gas fouling, cracked insulators and other spark plug malfunctions that can cause plug failure.

Weighs 2½ Pounds

The ACilloscope is portable—weighing only two and a half pounds—and can be connected to an engine in less than 30 seconds, AC engineers say. It checks efficiency by measuring the voltage required to fire the spark plugs when the engine is running. All the plugs in the engine are analyzed at the same time.

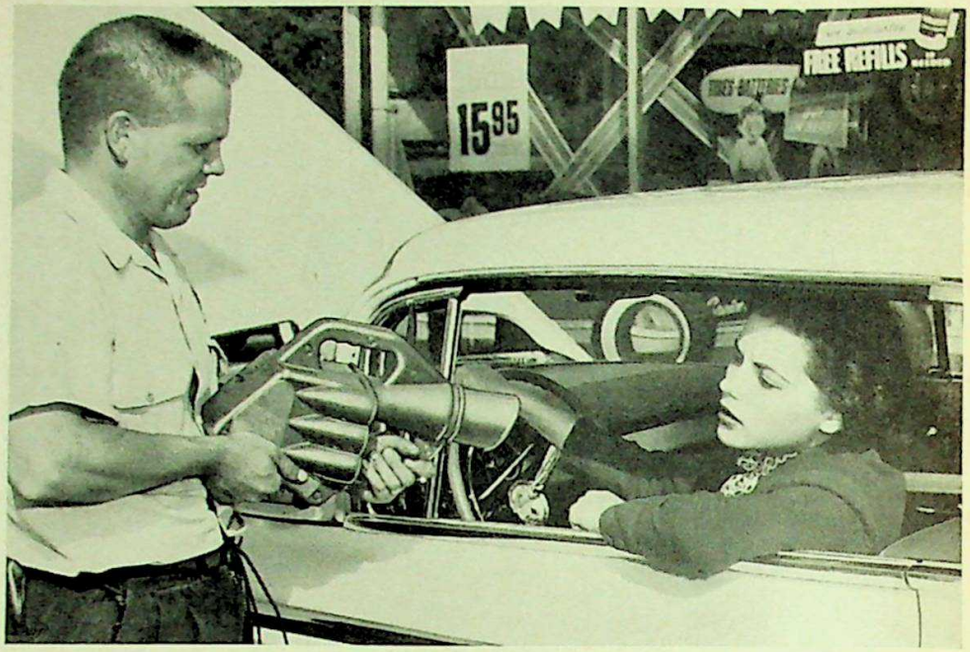
It is being made available to garages and service stations, and will eliminate the costly and time-consuming job of removing the plugs for inspection and testing. AC engineers believe the ACilloscope will make spark plug testing as much a part of regular servicing as checking the oil and water.

The instrument, simple to operate and understand, shows spark plug condition as a wave-like pattern on the screen of a scope. Car and truck owners can "see for themselves" the operating condition of their plugs, with the various patterns easy to detect and understand.

Battery Supplies Power

Spark plug performance has a tremendous effect on both mileage and performance, AC engineers point out. Tests conducted at the General Motors Proving Ground indicate that gas mileage is reduced 19 per cent at 60 miles per hour when only one plug is misfiring in a V8 engine.

Made of high impact plastic, the ACilloscope operates off power supplied by the car battery and automatically adjusts to either six-volt or 12-volt operation. It has a lock-in circuit with only one control needed—a tuning knob to expand the pattern when studying conditions.



Checking spark plugs is as quick and easy as getting a tank full of gas when servicemen use the new electronic analyzer, announced by AC Spark Plug Division of General Motors. The new instrument, called an ACilloscope, can be connected to an engine in less than 30 seconds and is simple to use and easy to understand. It reveals the operating condition of all the plugs in the engine without the necessity of removing them for inspection and testing. Car and truck owners are able to "see for themselves" when plugs are not operating at top efficiency.

Ford Falcon Priced Below Corvair

Ford Motor Company's Falcon is the lowest-priced six-passenger automobile in the industry, Henry Ford II, president, announced early in October. He pointed out that the two-door model has a suggested list price of $1,746, and the four-door model is priced at $1,803.

This compares with $1,810 for Chevrolet's two-door Corvair, which is not yet in production, and with $1,860 for the four-door Corvair. Ford also said that the two-door Falcon will cost $305 less than the 1960 Ford Fairlane two-door, lowest-priced six-passenger car of the most popular three.

Suggested factory list prices do not include distribution and delivery charges, reimbursement for federal excise tax, state or local taxes, license fees, or optional equipment.

Ford also announced suggested list prices for the following option and accessory items: Radio, $50.20; heater, $63; automatic transmission, $147.60; safety padded dash and visors, $17.80; safety belts, $19.10; windshield washers, $12.70; deluxe trim, $60.90; and white sidewall tires, $27.20.

Willys Introduces 'Jeep' Surrey Model

The horse-drawn surrey of old has a modern counterpart in the "Jeep" surrey, new vehicle being introduced by Willys Motors, Inc. Complete with fringe on its canvas top, the Surrey is gaily trimmed in pink, green or blue candy stripes. It is designed primarily for low-cost rental to guests at resort hotels and vacation centers. A similar model, the "Jeep" Gala, was introduced to the export market early this year and has gained wide popularity as a "fun car" at resorts in Hawaii, Mexico and the Caribbean area.

ELECTED PRS DIRECTORS

Three new directors have been elected by the Michigan Chapter, Public Relations Society of America. They are: Frank S. Hedge, of Communication Counselors, Inc.; Raymond E. Hayes, of General Motors Corp.; and Donald J. McGowan, of Consumers Power Company, Jackson.

Mueller Cites Challenge To Business

Conservatism is no longer in the doghouse—it has won massive public acclaim and support, declared U. S. Secretary of Commerce Frederick H. Mueller, in a recent address before the Economic Club of Detroit.

F. H. MUELLER

"It has done so partly because its spirit is in sharp contrast with the habitual defeatist attitude of professional left-wing worry-warts — who cannot dream except in patterns of Big Government spending and control—who cannot speak except in the dead language of class struggle—and who cannot climb except by pulling down something or somebody," Mueller asserted.

Conservatism Gains Toe Hold

"The present generation has been plagued by wars and depressions," he continued. "It has been poisoned by hatreds, haunted by fears and disappointed by illusions. Sometimes people have been led astray by the siren music of radicalism or by the hog calls of spendthrifts.

"But the public learned from bitter experience that the road to the extreme left always leads to less freedom and less jobs and to more taxes, bigger national debt and greater income-robbing inflation."

The Secretary said that a "counter-revolution of common sense conservatism" has gained a toe hold. As a consequence of this new reliance on private resourcefulness, he pointed out, the Gross National Product (prior to the steel strike) was at a record annual rate of $484,500,000,000. Economic power is poised for a thrust that can push our output even higher in the months ahead, he said.

Contributing to public confidence is a government that has provided many accomplishments in strengthening economic stability and inflation-free growth, he explained.

"The decisive battle for strong, sound government was fought and won in the recent Congress," the Secretary declared. "Last January," he said, "radical tom-toms were beating out anti-business propaganda. Corrupt and criminal elements in high places in a very small number of labor unions were betraying workers and thumbing their noses at public authority. Spendthrift claws were reaching for the taxpayer's pocket.

Need Answer to Strikes

"But a fighting President—backed by a fighting Conservative Coalition in and out of government—aroused the nation to the perils of irresponsibility. Overwhelming public response gave Congress the guts to balance the budget, to curb the abuse of power in labor, and to save the American people from the merciless disaster of inflation.

"We have gained a bridgehead against squandermania, but we have not yet won the war," Secretary Mueller warned.

Commenting on the steel strike, Mueller said: "We must find an answer to these constant strikes and threats of strikes that menace the security of the worker, the economic health of the country, and the safety of the United States.

"The greatest challenge which this competitive and explosive modern age makes on American businessmen is to participate in national leadership in the field of public affairs," Mueller asserted.

Business Must Be Heard

"In this modern age," he continued, "isolation is more than useless, it is blind stupidity. Unless businessmen make national policy and public affairs also their business, free enterprise in this kind of world may find itself out of business in the next few years."

In support of his contention, Secretary Mueller offered a "Four-Point Program of Personal Political Action, which he summed up as follows:

"(1) Think much more deeply on public questions; (2) speak up much more frequently on vital issues; (3) play a much more active role in public affairs; and (4) encourage much more political action by young people."

Approve 3-For-1 Stock Split

Stockholders of The Brunswick-Balke-Collender Company have voted approval of a three-for-one split of the common stock as proposed by the board of directors in September. At the same time, stockholders approved an increase in the authorized number of common shares to 12,000,000 from the previously authorized 5,000,000 shares.

The new stock, on the basis of two additional shares for each share now held, will be distributed Nov. 12 to stockholders of record on Oct. 28. As of Sept. 30, 1959, there were 2,415,637 common shares outstanding. The new stock is expected to be placed on a 60-cent annual basis, as compared with the $1.50 annual rate for the old stock.

MAHON DIVIDEND VOTED

Directors of The R. C. Mahon Company, Detroit, have declared a cash dividend of 30 cents a share on the $5 par value common stock, payable Dec. 10 to stock of record on Nov. 27.

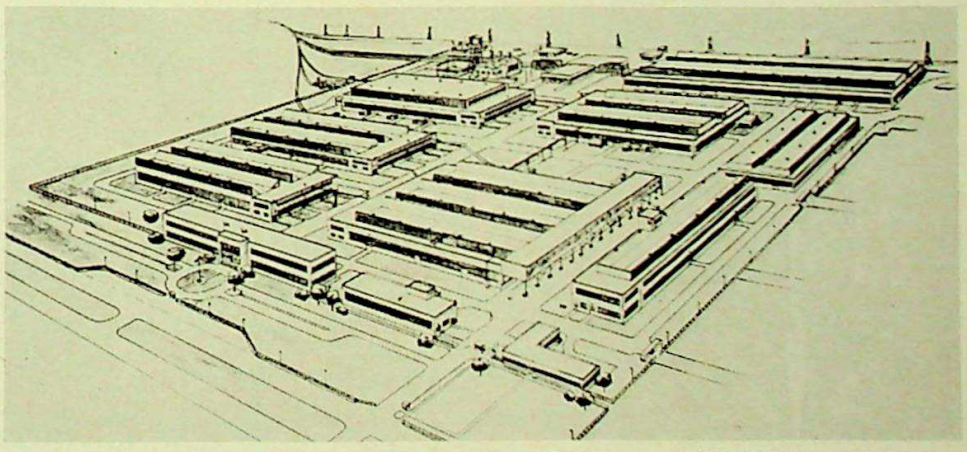
WRITES AVIATION INSURANCE

Airway Underwriters, first aviation insurance company to be organized in Michigan, has been licensed by the Michigan Insurance Department. Located in Ann Arbor, the new firm is headed by Robert Crawford, of Milan, as president.

FOR SALE

FORMER NAVAL ORDNANCE PLANT

WARREN, MICHIGAN



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James B. Grant, H. M. Seldon Co., Reynold H. Greenberg, J. J. & R. H. Greenberg, Inc., and Howard L. Storch, Browne & Storch, Inc., *members Society of Industrial Realtors.*

BROKERS COOPERATION INVITED

Detroit Banks Report 9-Month Earnings

Reports of Detroit's larger banks for the first nine months of 1959 revealed earnings comparable with those for the like period of 1958, with either slight increases or declines indicated.

National Bank of Detroit reported net operating earnings of $11,610,667 for the nine months ended Sept. 30, 1959, equivalent to $3.63 per share on 3,200,000 shares outstanding. This compares with $11,251,869 in the like 1958 period, or $3.52 a share, adjusted for the 10.444 per cent stock dividend paid earlier this year.

Capital Funds Up $7.4 Million

Net earnings after provision for reserves were $10,116,373, or $3.16 per share for the first nine months of 1959, as compared with $9,523,399, or $2.98 a share in 1958.

Total capital funds amounted to $153,499,355 on Sept. 30, 1959, reflecting an increase of $7,450,768 since the same date in 1958.

Deposits totaled $1,753,074,448 as compared with $1,688,631,088 on Sept. 30, 1958. Included in the 1959 total were $435,078,170 of savings and time deposits, which represented a gain of $13,208,866 in the past 12 months.

Total loans were $752,099,698, as compared with $651,900,602 on Sept. 30, 1958, an increase of $100,199,096.

Earnings Slightly Lower

Joseph M. Dodge, chairman of The Detroit Bank and Trust Company, Detroit, reported for the nine months ended September 30, 1959, net operating earnings after provision for federal income taxes of $6,150,023, or $3.35 a share. This compares with $7,068,787, or $3.85 a share for the nine months ended Sept. 30, 1958.

Total capital funds, including general reserves, have increased $2,878,805 since the end of 1958 to $78,040,997. Total deposits as of Sept. 30, 1959, were $861,181,891.

Deposits Show Gain

Net operating earnings of Manufacturers National Bank of Detroit for the first nine months of 1959 amounted to $4,522,238, or $3.61 a share on 1,252,850 shares, it was announced by William A. Mayberry, chairman of the board. Comparable net operating earnings for the same period in 1958, based on the present outstanding capital stock, were $3,742,525, or $2.99 a share.

Total deposits on Sept. 30, 1959 were $725,368,767, as compared with $704,689,830 a year earlier. Total resources were $795,414,185 against $770,138,190.

City Bank Grows

Net operating earnings of City Bank, Detroit, (after provision for federal income taxes) amounted to $718,999, or $2.78 a share, for the first nine months of 1959. This compared with $605,043, or $2.34 a share for the like 1958 period, or an increase of 18.8 per cent, it is announced by John H. French, Jr., president.

Total deposits on Sept. 30, 1959, amounted to $136,941,495, an increase of $6,600,000 over the $130,294,468 a year earlier. Total resources now are up to $151,056,253, an increase of $11,600,000 from the $139,459,186 of a year ago.

On A. B. A. Executive Council

J. H. FRENCH, JR.

At the recent annual convention of the American Bankers Association, held in Miami, John H. French, Jr., president of City Bank, Detroit, was named a member of the executive council of the association for a one-year term.

The appointment was made by John W. Remington, of Rochester, N.Y., newly elected president of the A. B. A.

The executive council is the top governing body of the American Bankers Association, to which organization practically all of the nation's 14,000 banks belong.

BOOSTS HAWAIIAN SALES

Chrysler Corporation expects to sell 25 to 30 per cent more cars in the Hawaiian Islands in 1960 than last year, according to E. C. Quinn, vice-president-sales divisions.

ACCOMMODATES 18 VEHICLES

The lower banking floor of the new main office building of National Bank of Detroit will accommodate 18 bank delivery trucks, three vendors' trucks, and four armored cars.

Outlook Good For Plating Equipment

In spite of delays in ordering caused by the steel strike, sales of electroplating equipment for the current year should top last year's levels by 40 per cent, according to Clyde H. Reeme, president of the Udylite Corporation, Detroit.

Interested buyers have been tending to delay placing their orders, he said, pending some definite determination of the steel situation. But, he accounted for the bright forecast with two facts: Equipment sales during the first three quarters of the year were up about 50 per cent over 1958; and normal deliveries are being made on current orders.

Backlog of equipment orders for Udylite, world's largest source of both equipment and supplies for plating, currently is about twice its level in the previous year. About 25 per cent of equipment sales so far this year have been to the automotive industry; 15 per cent to companies producing telephone and telegraph equipment; and another 15 per cent for production of electrical equipment for internal combustion engines. Electroplating and polishing shops accounted for about five per cent of total orders, while the balance went to a wide variety of metal-working industries.

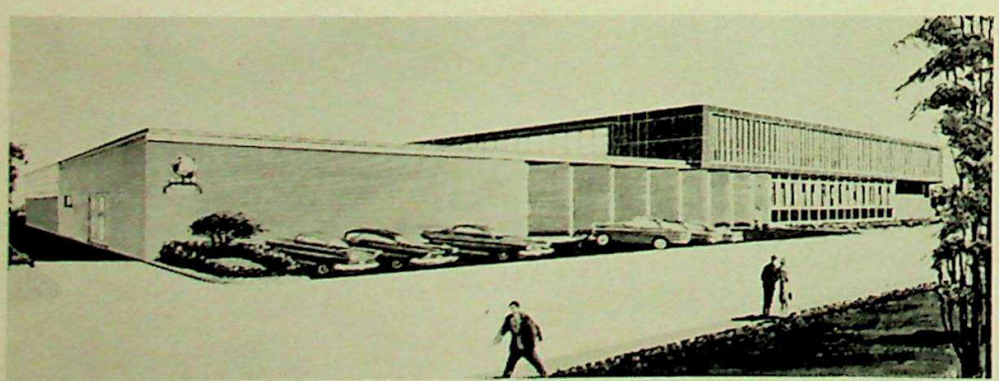
Supplies of steel on hand at the Udylite plant in Detroit still are adequate for maintaining production schedules at normal rates, Reeme stated.

Hoover Ball Erects Saline Building

Construction has been started on a research and development building for Hoover Ball and Bearing Company in Saline, adjacent to the company's machine tool subsidiary, Uniloy, Inc.

H. L. Schrock, Jr., president, said the new facility will contain 27,000 square feet of floor area and will house a controlled atmosphere electronics laboratory equipped with the most modern testing and control apparatus.

Schrock pointed out that Hoover's expanded basic research program will carry emphasis on advanced materials and surface finishes for the Ann Arbor-based company's products, and applied electronics and machinery for its quality control and manufacturing processes.



The one-story structure on the left is an artist's sketch of the research and development building now under construction at Saline for Hoover Ball and Bearing Company, of Ann Arbor. Designed and engineered by Cunningham Engineers, Inc., Detroit, it is being erected by the Cunningham-Limp Company, Detroit.

R. C. Allen Business Machines, Inc., Grand Rapids, has rejected a proposed merger with Fairchild Camera & Instrument Corp., of Syosset, N.Y.

Automotive Predictions

(*Continued from Page 16*)

Robert S. McNamara, vice-president-car and truck group, Ford Motor Company, told a M-E-L Division press preview that Ford is the only company in the industry that has "equipped its dealer chains with products which will support the dealers no matter which way the market turns."

Harold E. Churchill, president of Studebaker-Packard Corporation, believes that more than 30,000,000 of the 70,000,000 cars that will be sold during the next decade will be "Lark-size" automobiles. He estimates that 100,000,000 cars will be on America's roads by 1970.

Herman P. Sattler, manager of truck sales, Chevrolet Motor Division, predicts 1,075,000 new truck sales for 1960. Last year, he estimated 1959 truck sales at 875,000 but had to revise this estimate upward to 970,000.

Thomas J. O'Neil, a member of Ford's dealer policy board, predicts that the normal new-truck market could expand by 50 per cent within ten years. With an anticipated increase of 40 per cent in the nation's economy by 1970, this would mean 15 million trucks in operation, he said. "Given a truck population of such dimensions, it would not be unreasonable to predict a normal new-truck market approaching 1,500,000 units a year by the end of the decade," he says.

William F. Hufstader, vice-president of General Motors Corporation's distribution staff, predicts that rising standards of living and increased purchasing power will put 100,000,000 motor vehicles on the nation's highways by 1970. "There will be three cars for every two now on the road," he says.

S. A. Skillman, general sales manager for Studebaker-Packard Corporation, revealed to dealers visiting the South Bend plant that S-P started the 1960 model year with 2,600 upgraded dealers, an increase of 600 over last year.

Jackson Firm Boosts Executives

E. C. Hetherwick, formerly president of Hayes Industries, Inc., Jackson, manufacturer of automotive parts, has been elected chairman of the board and chief executive officer, and G. Boyd Vass, formerly executive vice-president, has been advanced to president.

Directors also named two new vice-presidents—William E. Steppon and William J. Hobday. Hobday is in charge of manufacturing. Other officers reelected were: D. C. Bender, vice-president in charge of engineering; W. J. Donahue, secretary; and W. E. Hertler, treasurer.

AD AGENCY MOVES

Burke, Bartlett Company, Inc., Royal Oak advertising agency, has moved all its facilities into its own new building at 26311 Woodward avenue, Royal Oak, effective as of Nov. 1.

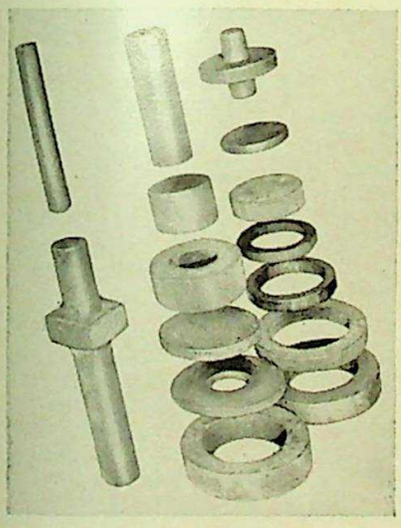
The market for medium-priced cars is expanding, not shrinking, according to **Ernest R. Breech,** chairman of the board of Ford Motor Company. "If one consults only the registration figures, it may appear that the medium-priced market has shrunk," he explained. "But if it were possible to separate the more expensive models of the low-priced lines and add them to the medium-priced cars, we would see that this market has not shrunk at all."

Chrysler Corporation entered the 1960 passenger car market with the most attractive selection of models and body styles it ever has offered, states **Byron J. Nichols,** group vice-president-automotive sales. He said that a total of 93 different models are being offered by the corporation.

Charles F. Baldwin, Jr., special projects manager for Ford Division, Ford Motor Company, predicts the sale of more than a million domestically produced small cars in the 1960 model year "if the steel strike is settled and we have a good year for the industry."

Auto sales are likely to be "above normal" in 1960 and could exceed the 7,000,000 mark, according to **George P. Hitchings,** manager of Ford Motor Company's economic analysis department. He based his "above normal" forecast on a likely partial make-up for the 25 per cent below normal year during the 1958 recession.

STRENGTH and ECONOMY ASSURED THROUGH FLAT-DIE FORGINGS!



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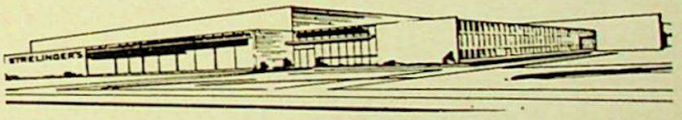

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CHAS. T. BUSH, *Chairman of the Board*
JOHN N. FAILING, *Vice Pres. & Sales Manage*

PERSONNEL CHANGES

Albert O'B. Andrews has been elected president of the Industrial Division of American Radiator & Standard Sanitary Corporation, headquartered in Detroit, succeeding John W. Brennan, who has been given new duties by the corporation.

Andrew T. Marchuk as director of marketing for Sherman Products, Inc., Royal Oak, in charge of all marketing activities including sales, advertising, service and new product development.

Richard P. Villwock as research engineer by Michigan Abrasive Co., Detroit. He formerly held a similar post with Midwest Abrasive Co., Owosso.

Charles L. Howlett as manager of the Alpena mill of Huron Portland Cement Co., succeeding William G. MacDonald, retired.

James E. Hopkins as advertising and public relations assistant by the Stainless & Strip Division of Jones & Laughlin Steel Corp., Detroit.

Burton R. Durkee, coordinator of creative services in the Detroit office of J. Walter Thompson Co., has been elected a vice-president of the agency.

David K. Easlick as assistant vice-president-personnel by Michigan Bell Telephone Company. He succeeds **George M. Aldridge**, who has been made assistant general plant manager.

J. R. Patterson as general administration manager of the Tractor and Implement Division of Ford Motor Company.

Francis J. Sullivan has been advanced from secretary and treasurer to vice-president and treasurer by Federal Screw Works, Detroit. Succeeding him as secretary will be **F. Dewey Tennent** who also will continue as administrative assistant to the president.

D. A. Young as chief design engineer for the Engineering Science Division of American Metal Products Company.

John L. Copeland, formerly manager of the Woodward-Grand Boulevard office of the Manufacturers National Bank of Detroit, has been named an assistant cashier and assigned to the main office.

George L. Innes as director of sales and development for Michigan Chemical Corp., St. Louis, Mich.

Robert W. Stephens as superintendent of the Midland plant of the Chemicals and Refractories Division of Kaiser Aluminum & Chemical Corp.

Clyde C. Bennett has been appointed a vice-president of Campbell-Ewald Co., Detroit, national advertising agency. He is supervisor of the United Motors Service and Delco Battery accounts.

Donald T. Walker as sales manager for Cogsdill Tool Products, Inc., Detroit.

Leo E. Reed has been made general manager of International Salt Company's Detroit and Cleveland salt mines. He has managed the Detroit mine since 1945.

Charles R. Weir, vice-president of Commonwealth Industries, Inc., Detroit metal processing company, has been elevated to president, succeeding **Charles G. Heilman**, president since 1922 who now will be chairman of the board.

Clifford A. Terry as chief tool engineer for Maxitrol Company, Detroit. He formerly was with Detroit Transmission Division of General Motors, and Kelvinator Division of American Motors Corp.

Thomas M. Farrell, manager of the Grand Rapids Bureau for UPI, has been appointed information officer of the State Highway Department.

William F. Connolly has been named as general sales manager for The Electric Autolite Company's replacement sales division.

Maurice Hill, Jr., has been named by Rinshed-Mason Company, Detroit, as assistant industrial sales manager.

Norman Simpson has been appointed manager of the Kelly-Whittier office of the Manufacturers National Bank of Detroit. He fills the vacancy caused by the recent death of Lynn G. Hitchcock.

Frederick W. Neu has been named vice-president and general manager of Louis Garavaglia Contractors, Inc., Centerline.

Norman C. Smith as manager of purchases for the Detroit office of Harry W. Taylor Co., Detroit and Kalamazoo.

Ira A. Lutz as senior vice-president, treasurer and chief operating officer of Clinton Engines Co., Clinton, and **Cletus V. Erlacher, Jr.**, as vice-president and general sales manager.

William W. Wellborn as vice-president and director or research and product development for Abrasive Dressing Tool Co., Detroit.

Victor M. Schwartz, executive vice-president and general manager of the L. H. Butcher Co., Los Angeles, a Udylite subsidiary, has been elected a director of The Udylite Corporation, Detroit.

Arthur J. Ellis, until recently a vice-president, assistant general manager and a director of Farmcrest Bakeries, Inc., has joined H. W. Schmidt & Co., Detroit investment security firm, as an associate.

S. W. Drews has been elevated by Peerless Cement Company to assistant to the vice-president-sales.

William B. Hibbard, of Baker Simonds & Co., is the newly elected president of the Securities Traders Association of Detroit & Michigan for the coming year.

Alton L. Wheeler as manager of sales for the Peninsular Steel Company, Detroit.

George W. Holt has been named by Equitable Life Assurance Society as manager of the Detroit agency formerly headed by Coy G. Ecklund in the Penobscot Building.

William T. Dobson, Ann Arbor, is the newly elected president of the Michigan Association of Insurance Agents.

Townsend F. Beaman, widely known Jackson patent attorney, has been elected a director of the Sparton Corporation, Jackson.

Philip H. Maxwell as sales manager of the automotive division of The Kelsey-Hayes Company, Detroit. He previously was assistant sales manager.

Edwin L. Karpick has been named by Gray & Kilgore, Inc., Detroit advertising agency, as account executive for Vickers Incorporated, a division of Sperry Rand Corp.

James G. Nick as vice-president and sales manager of Leader Precision, Inc., Warren, manufacturer of multiple heads, fixtures and gages.

Joseph F. Jannuzzi has been named personnel relations assistant-labor relations by Michigan Bell Telephone Company.

L. A. McDonald has been appointed vice-president and general manager of Super Tool Co., Detroit; **M. J. Steffes** as vice-president of engineering; and **E. Novack** as general sales manager.

Harry Bill, Jr., as vice-president-sales for Michigan Tectronics, Inc., Detroit.

Eugene Makie as general manufacturing manager of the Utica Division of the Curtiss-Wright Corp.

Maurice N. Day has been appointed as assistant chief engineer of Michigan Wisconsin Pipe Line and American Louisiana Pipe Line Companies. Day has been with Michigan Consolidated Gas Company since 1949.

Charles D. Marsh has joined the Bloomfield Hills office of Manley, Bennett & Co. as a registered representative.

Walter H. Hassenplug, executive vice-president of Acme Industries, Inc., Jackson, has been elected a director of the company. **Robert C. Robertson** has been appointed vice-president in charge of sales by the same firm.

Victor L. Kloppenburg as executive secretary of Standard Accident Insurance Co., Detroit.

Harvey W. Alexander as assistant public relations manager for Ford Division, Ford Motor Company.

Francis J. Hennecke as sales manager of American Prestressed Concrete, Inc., Center Line.

Couper Heads Young's Automotive Div.

Irving R. Seeley, executive vice-president of Young Spring & Wire Corporation, Detroit has announced the establishment of a separate automotive division and the appointment of Thomas Couper, a vice-president and director of the corporation, as general manager of this division.

THOMAS COUPER

Couper, who has spent most of his business life with the corporation, is well known in the automotive industry. He will devote his time exclusively to managing affairs of the automotive division and will be headquartered in Detroit.

Seely said the move was an important step forward in a major program to improve further Young's position as a supplier to the automotive industry.

Young Spring & Wire Corporation has served the automotive industry for 52 years, and now operates automotive parts plants in Ecorse, Mich., Archbold, Ohio, Chicago and Los Angeles. Canadian plants are located in Windsor and Ajax, Ontario. A seventh automotive parts production facility now is under construction in Mount Olive, Ill.

NEW ARCHITECTURAL FIRM

Merger of Wheeler & Becker, architectural concern, and Grant-Richard Co., consulting engineers, as Wheeler, Becker & Sando, Inc., architects and engineers, has been announced. Offices are located at 1210 David Stott Building, Detroit. Byron H. Becker is president of the new firm.

CANADA . . . NEWS AND VIEWS

By J. M. PICKELL

PRIME MINISTER DIEFENBAKER VISITS DETROIT

"Canada is suffering from growing pains," said a long-retired Detroit automotive executive after listening to Prime Minister Diefenbaker at the Economic Club. Our friend was more envious than critical.

Mr. Diefenbaker, often referred to by Canadians as the "Clarence Darrow" of Canada, emphasized the "splendid relationship between the United States and Canada," also emphasized the complete interdependence of the two great neighbors, but again expressed his fear of American investments "controlling," or "threatening to control" Canada's industry and economics.

Our friend's only regret was that he could not be 40 years younger in Canada today, as he thought back to 40 years ago in Detroit. He believes Canada is about where Detroit was in 1920—with all the challenging future ahead. He realized that Canada has some reason to be concerned with approximately 50% of its manufacturing and natural resources owned and controlled by one "foreign" country — the U.S.A. But he also knew that European investments in the U.S. in its earliest days were loans for debt capital repayable in a given number of years, which is quite different from the equity investment Mr. D. and other influential Canadians criticize.

But our friend feels that Canada and Canadians have the money to correct this situation and it will be "easily worked out by the kind of neighbors we are." Mr. D. also emphasized that Canada still invites United States' investments.

"WHY THE HELL NOT?"

That was the headline on a leading article in The Economist, London (Eng.), following the British election. The Economist, to us, has always been a tremendous defender of Freedom and of Free Enterprise and the Capitalist system—but it is also realistically objective.

Thus, the lead on the "Why the Hell" article:

"Do let us try to keep the debate on Labour's future free from both exaggeration and underestimation. Even if Mr. Gaitskell were to curl up in uninterrupted sleep between now and 1964, Britain would be unlikely to face forty years of reactionary Tory rule. If the Tories were to become really reactionary, or if events made them seem so, the next election would see the 2 or 3 per cent swing that is needed to turn Mr. Macmillan out of power. But, at times when things are going moderately right and the Conservatives are keeping moderately left, Labour's policies are badly designed to please the 15 million supporters it needs, because those policies are too much trimmed to please two very small groups of people. These are the few thousands of Victorian Marxists who dominate many constituency Labour party meetings between elections, and the handful of leaders of Britain's major trade unions."

We thought we should bring this up because so many of our good friends are now "going into" politics or "taking a larger interest in Government." This ultimately, in a Democracy, means winning and holding the active, understanding goodwill of those interested enough to vote, or about 50% of our fellow citizens.

We felt that the great victory for British Conservatives and "the turn of the tide" would give them an assurance they are hardly entitled to—as yet.

British Conservatives would score a great victory with a greatly increased majority in Parliament and Canada as a Conservative Government. But both of these Conservative Governments are much more Socialistic than the United States ever has been, or we hope and pray, ever will be. Both British and Canadian Conservatives took over about 70% to 80% of the Socialists, or the Liberals, they defeated at the polls, and your Conservatives of today would have looked like very dangerous radicals 25 years ago.

True, Liberal and Socialists which had gone much, much further to the left than the old Conservatives ever were to the right, will have to come closer to the middle road, just as the Conservatives had to do, although we think they could have done this without closing that road.

So, as we head for the 1960 election, may we offer you a reflection on the British election from W. L. Clark's "As We See It" column in The Windsor Star.

(*Continued on Page* 99)

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1954	$3.2 Million	$2.2 Million	$6.3 Million
1957	$4.2 Million	$3.0 Million	$8.6 Million
First six months of 1958	$2.2 Million	$1.4 Million	$4.5 Million

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Chrysler Offers New 6-Cylinder Engine

Chrysler Corporation has introduced a completely new six-cylinder engine, a new ram induction system for its high performance V-8 engines, new and improved manual transmissions, and an all-new, lightweight three-speed automatic transmission for use with six-cylinder engines in its 1960 passenger cars.

The engine line-up for the new 1960 Plymouth, Dodge Dart, Dodge, De Soto, Chrysler and Imperial cars was revealed at the recent press preview of the corporation's new offerings in Miami Beach, Fla.

Canted At Angle

Outstanding economy and performance are combined in the completely new Chrysler-designed, 225 cubic-inch displacement, six-cylinder engine. Inclined to the right at an angle of 30 degrees, this design results in a low center of gravity, and quiet performance in all speed ranges.

Ease of maintenance and service was a primary consideration in locating exterior components—air cleaner, carburetor, manifolds, water pump, generator, and starter on the left, and spark plugs, distributor, oil pump and filter, and fuel pump on the right side.

The new engine has a rigid cast-iron cylinder block. Weight-saving aluminum is extensively used, as in the distributor and various pump housings, and six long curved aluminum branches—making up the intake manifold—supply fuel and air to each of the six cylinders from a single-throat downdraft carburetor.

A new torsional vibration dampener on the crankshaft further increases the quietness of the engine.

Increased power in the medium-speed range is achieved by Chrysler's new ram induction system on its V-8's. Ram manifolding uses sonic pulsations in 30-inch intake tubes to ram additional fuel-air mixture into the combustion chambers. It provides enough extra boost in the mid-speed range for passing so that the use of "kickdown" or passing gears is unnecessary.

It has been described as "an induction system with many advantages and no disadvantages", since it gives the effect of supercharging without the complication of the supercharger's close fitting, rapidly rotating parts.

The new Chrysler-developed ram induction system will be available on the special high performance engines offered by each passenger car division.

Improved V-8 Engines

A number of design refinements and quality improvements in the Chrysler family of V-8 engines will give these economy leaders even greater durability and economy for 1960.

Service life is extended by improved cooling and the use of aluminum intake valves to resist corrosion. Timing chain lubrication has been improved for quieter operation.

Fuel economy has also been improved in all V-8's by a three-stage piston in the carburetor linkage for better control of the automatic choke during warm-up. Four-barrel carburetors have been revised for better operation on lean fuel-air mixtures.

Compression ratios, bore and stroke measurements and displacements on the engines are generally the same as those on the 1959 engines.

A completely new three-speed lightweight automatic transmission, designed specifically to match the output characteristics of the new six-cylinder engines, is offered as option equipment. Identical in principle to the famed TorqueFlite, the new transmission's components are built to the same high quality standards.

Two other important engineering advances for 1960 are the new lightweight, compact manual transmission for use with six-cylinder models and a new three-speed heavy duty manual transmission for use with V-8's, designed especially for high-torque applications.

A summary of engines offered on the 1960 Plymouth, Dodge Dart, Dodge, De Soto, Chrysler and Imperial cars is as follows:

1960 Engine Line-Up

Chrysler Corporation's 1960 power plant lineup ranges from the all-new 225-cubic inch displacement inclined six-cylinder engine to the 413-cubic inch V-8.

Line by line the engines available and their displacements are:

Plymouth — 30-D Economy Six—225 cubic inches. Fury V-800 — 318 cubic inches. The Sono-Ramic Commando—361 cubic inches with ram induction system.

Dodge Dart—Economy Slant Six—225 cubic inches. Red Ram V-8 — 318 cubic inches. D-500 V-8—383 cubic inches and ram induction available on Dart Phoenix models.

Dodge—Super Red Ram V-8—361 cubic inches. Ramfire V-8 — 383 cubic inches. D-500 V-8—383 cubic inches and ram induction.

De Soto—Turboflash V-8 — 361 cubic inches. Adventurer V-8 — 383 cubic inches. Adventurer Mark I—383 cubic inches. Ram Charge Adventurer — 383 cubic inches with ram induction.

Chrysler—Golden Lion 383—383 cubic inches. Golden Lion 413 — 413 cubic inches.

Imperial — Imperial V-8 — 413 cubic inches.

Statement of the Ownership, Management, Circulation Required by the Act of Congress of August 24, 1912, as Amended by the Acts of March 3, 1933, and July 2, 1946. (Title 39, United States Code, Section 233)

Of Michigan Manufacturer & Financial Record published monthly at Detroit 38, Michigan for October 1, 1959.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Manufacturer Publishing Company, 8543 Puritan Ave., Detroit, Michigan; Editor, Edward E. Hayes, 8543 Puritan Ave., Detroit, Michigan; Business Manager, J. M. Pickell, 8543 Puritan Ave., Detroit, Michigan.

2. The owner is: (If owned by a corporation its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm its name and address, as well as that of each individual member must be given.) Manufacturer Publishing Company, 8543 Puritan Ave., Detroit, Michigan. J. M. Pickell, 8543 Puritan Ave., Detroit 38, Michigan; J. M. Pickell, Jr., 8543 Puritan Ave., Detroit 38, Michigan; M. R. Pickell, 8543 Puritan Ave., Detroit 38, Michigan.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities: (If there are none, so state.) None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear on the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above was—(This information is required from daily, weekly, semi-weekly, and tri-weekly newspapers only.)

J. M. Pickell
(Signature of Business Manager)

Sworn to and subscribed before me on this 28th day of October, 1959.

Mel M. Werden
Notary Public, Wayne County, Michigan
(My commission expires August 13, 1961)
(Seal)

CHOOSES HUBERT AGENCY

The Air Valves Company, of Warren, has appointed F. B. Hubert Advertising Counselors, Detroit, to direct its advertising, publicity and technical literature programs.

New Michigan Corporations

(*Continued from Page 70*)

D. S. Daley Mfg. Co., 15747 Wyoming Ave., Detroit; manufacture lighting fixtures, signs, luminaires; **Daniel S. Daley** $50,000

Bassett Manufacturing Co., 6490 Lincoln St., Gagetown; manufacture metal stampings; **Robert L. Bassett** $50,000

Big Mac Sausage Co., 234 North Sherman, Bay City; manufacture and deal in food products and beverages; **Robert S. Graves** $50,000

Custom Shower Door, Inc., 17357 Wyoming, Detroit; manufacture and deal in shower doors; **Philip R. Markus** $50,000

Key Chemical & Equipment, Inc., 18055 James Couzens, Detroit; manufacture chemicals and equipment for use in manufacturing of chemicals; **Robert Monahan** $50,000

Precision Spindle Service Co., Inc., 23420 Woodward Ave., Ferndale; manufacture machinery; **Donald A. Lumley** $10,000

Royal Oak Mortgage Co., 1204 North Woodward, Royal Oak; general real estate mortgages and investment business; **Henry A. Kopecky** $150,000

Stromberg-Carlson Products, Inc., 225 East 16th St., Traverse City; manufacture accessories for trailers and kindred products; **David E. Stromberg** $50,000

Aldoa Company, 12727 Westwood, Detroit; manufacture chemicals; **Mollie C. Leonelli** $50,000

Regional Building Investment Corp., 16100 Kentucky Ave., Detroit; deal in investments; **William E. Francis** $200,000

Cass, Inc., 8920 Lyndon Ave., Detroit; real estate and building; **C. Wesley Ebling** $200,000

G. K. Cocktail House, Inc., 1360 West Fort St., Detroit; general manufacturing; **George J. Kerastas** $15,000

Greenville Grain & Feed, Inc., 711 North Lafayette, Greenville; manufacture farm implements, feed, grain; **Irving L. Nielsen** $50,000

State Steel Corp., 19488 Stoepel, Detroit; manufacture steel, metals and metal products; **Harry Davis** $50,000

The Cabot Building, Inc., 4815 Cabot Ave., Detroit; real estate and building; **William B. Chase** $500,000

Galan Manufacturing Co., Inc., 2212 South Telegraph Rd., Pontiac; manufacture metal tubing machinery; **Julian Galan** $50,000

Mid-State Mechanical, Inc., 515 Thomas St., Mt. Pleasant; manufacture and sell heating plants, etc.; **Dale Joslin** $10,000

Gen Shopping Center, Inc., 4250 Penobscot Bldg., Detroit; own and operate shopping centers; **Richard E. Cross** $500,000

Canada—News and Views

(Continued from Page 97)

BEHIND CONSERVATIVE WIN—

"Quintin McGarel Hogg, P.C., Q.C., second Viscount Hailsham, deserves some major credit for the victory in Great Britain of Prime Minister Harold Macmillan and the Conservatives.

"When the Tory fortunes seemed lost, Lord Hailsham took over the chore of organizing the Conservatives and getting the threads together again. If he were not in the House of Lords he would be on the Front Bench in the House of Commons. He is 52 and he has worked hard at reorganizing and revitalizing the Conservative party in the United Kingdom.

"In the past couple of years Lord Hailsham has been here, there and everywhere in Britain. He addressed large meetings and he talked to small meetings. He rallied supporters and enlisted new helpers.

"When most of the Tories were ready to throw in the towel two years ago, the Viscount refused to be downhearted.

"When a party worker like that has the advantage of having a man like Mr. Macmillan as leader, the whole group can go places. And, go places the Conservatives did on Thursday."

Organization and hard, unremitting work at the grass roots will win—or lose—our 1960 elections.

And perhaps you should remember that the great Conservative victory in England, with a wonderful majority in Parliament, represented a switch of just ONE AND ONE-HALF PER CENT OF THE VOTES.

You can do it, too.

Dow Chemical Forms New Division

Formation of a new division to handle industrial chemical services has been announced by Dr. Leland I. Doan, president of The Dow Chemical Company, Midland. Known as the Industrial Service Division, it will take over solvent cleaning functions performed by the company's Dowell division for many years. It also will provide services and products in the municipal and industrial waste and water treatment areas.

Scheduled to begin operations Dec. 1, the new division will have headquarters in Cleveland.

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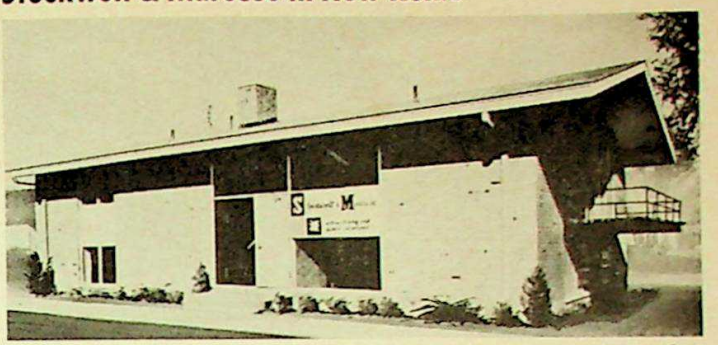
Stockwell & Marcuse in New Home



View of the new contemporary, two-story structure that now houses Stockwell & Marcuse, Detroit advertising and public relations firm. It is located at 15600 Puritan avenue, a block west of Greenfield road.

One of Detroit's oldest advertising and public relations firms—Stockwell & Marcuse—has occupied larger quarters in a new, contemporary, two-story structure at 15600 Puritan, a block west of Greenfield. The firm has been actively associated with financial accounts, home building, land development, and production accounts for over 25 years.

"In addition to doubling our floor area in this air-conditioned building of our own, we have added some new facilities including a conference room with pegboard wall display presentations, hi-fi throughout the building for test broadcasting, and a projection room," pointed out William H. Stockwell. "Every room also has unobstructed natural light," he added.

Stockwell was graduated from the University of Michigan Law School in 1930, is a member of the Bar, past-president of the Detroit Executives Association, and public relations chairman for District 10 of the Boy Scouts.

Marcuse went into the advertising field immediately after his graduation from the University of Michigan Literary School in 1927. He is a former chairman of the American Jewish Committee, and this year is president of Temple Beth El.

Detroit Steel Expands At Portsmouth

A $75,000,000 expansion program for the next five years has been announced for the Portsmouth Division of Detroit Steel Corporation. Max J. Zivian, president, said the expansion would be on top of the $90,000,000 program now nearing completion at Portsmouth, Ohio.

Zivian pointed out that the new program would double the division's capacity and add about 1,000 to the present employment of 3,500.

A new large-capacity, forward-control delivery truck series, with models for refrigeration and other special purposes, has been introduced by Divco Truck Division of Divco-Wayne Corp.

The new trucks, called Dividend Series 7, are of the multi-stop type for such hauling as wholesale food distribution, appliance and furniture delivery and frozen food transportation. Gross vehicle weights range from 10,000 to 16,500 pounds.

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• CONSTRUCTION •

*** Items selected from daily building reports issued by the Builders and Traders Exchange, Detroit.**

***Matthew Lalewicz, Inc., Center Line,** was low bidder at $267,450 for construction of a school building in Roseville for St. Angela's Parish.

***Laitala & Nuechterlein, Lansing architects,** are preparing preliminary plans for a new $300,000 church in Southgate for Peace Lutheran Church.

***Trend Associates, Kalamazoo architects,** are preparing preliminary plans for a new $250,000 elementary school and new $1,000,000 high school, both in Paw Paw for Paw Paw Public Schools.

***Wallace N. Bjorklund Co., Douglas,** has been awarded contract on base bid of $596,301 for construction of a new high school in Charlevoix for Charlevoix Public Schools.

***Arthur Greig & Associates, River Rouge** architects, are preparing preliminary plans for Beachwood Community Center in River Rouge, estimated cost $245,000, for City of River Rouge.

***E. H. Wittman Construction Co., Inc.,** Wyandotte, was low bidder at $385,468 for Riverside Elementary School for Huron School District.

***Bryant & Detwiler Co., Detroit,** has been awarded contract on bid of $3,400,000 for construction of new buildings in Saginaw, Bay and Midland Counties for Tri-County College District.

***Arthur O. Misch Co., Detroit,** has been awarded contract on bid of $329,637 for construction of a police building in East Detroit for City of East Detroit.

***Spence Bros., Saginaw,** has been awarded contract on bid of $333,000 for construction of new Jones Elementary School in Saginaw for Saginaw Board of Education.

***Miller-Davis Co., Kalamazoo,** has been awarded contract on bid of $2,279,000 for construction of two residence halls and a food commons building at Central Michigan University, Mt. Pleasant, for Michigan State Board of Education.

***A. Hensel Fink, Philadelphia architect,** and Frank E. Dean, Albion architect, are preparing plans for a new $330,000 church in Grosse Ile for Grosse Ile Presbyterian Church.

***Osterink Construction Co., Grand Rapids,** has been awarded contract on bid of $445,395 for new seminary building in Grand Rapids for Calvin College & Seminary Board of Trustees.

***Haussman Construction Co., Lansing,** was low bidder at $212,370 for P-K Building in Lansing for A. J. Power and R. Kirkpatrick.

***O'Harrow Construction Co., Jackson,** has been awarded contract on bid of $332,856 for new high school in Jackson for Vandercook Lake Public Schools.

***Detroit Harbor Terminals** is contemplating construction of new transit shed, office building and dock expansion, estimated cost $4,000,000.

***Detroit Board of Education** is contemplating construction of a new senior high school, 10 new junior high schools, and eight new elementary schools, estimated cost $90,000,000.

***Wayne State University** is contemplating construction of a general classroom building, estimated cost $2,000,000.

Tri-County College Project Under Construction

Bryant & Detwiler Co., Detroit general contractors, has been awarded the contract for constuction of the Tri-City College buildings, to be erected between Saginaw and Bay City for the Tri-County College District of Saginaw, Bay and Midland Counties. Construction will be started immediately.

Construction will total more than $5,000,000, and the project is slated for completion in 1961. Brysselbout, Dow and Wigen, of Midland, Saginaw and Bay City, are the architects.

***Edward M. Newman, Detroit architect,** is preparing preliminary plans for new shopping center and apartment development in Detroit, estimated cost $10,000,000, for Thomas Built Homes.

***Carl J. Reinke & Sons, Inc., South Bend,** Ind., has been awarded contract on bid of $688,633 for construction of two new elementary schools and additions to two other schools for Cassopolis Public Schools.

***Sedgewick & Sellers, Flint architects,** are preparing preliminary plans for a new $180,000 church in Flint for Trinity Methodist Church.

***Trend Associates, Kalamazoo architects,** are preparing plans for a new $150,000 church at Gull Lake for St. Ann's Church.

***Clark Construction Co., Lansing,** was low bidder at $331,993 for new high school in Middleton for Fulton Consolidated School District.

***Owen-Ames-Kimball Co., Grand Rapids,** has been awarded a negotiated contract for a new $200,000 supermarket in Grand Rapids for Plumb's Supermarket.

***Chas. W. Lane & Associates, Ann Arbor** architects, are preparing preliminary plans for a new $1,000,000 high school in Freeland for Freeland Community Schools.

***J. & G. Daverman Co., Grand Rapids** architects, are preparing preliminary plans for new elementary school and a junior-senior high school in Boyne City, estimated cost $800,000, for Boyne City Public Schools; also for a new $530,000 high school in White Cloud for White Cloud Public Schools.

***Guido A. Binda, Battle Creek architect,** has been selected to draw plans for a swimming pool, estimated cost $250,000, and auditorium, estimated cost $335,000, and a new elementary school, estimated cost $460,000 to $525,000, all in Springfield for Springfield's City Schools.

***James K. Haveman, Grand Rapids architect,** is preparing preliminary plans for Sinclair Elementary School in Grand Rapids, estimated cost $350,000, for Grand Rapids Public Schools.

***Simpson & Hartwick, Lansing architects,** are preparing preliminary plans for a new $300,000 elementary school in Laingsburg for Laingsburg Community Schools.

***Meathe & Kezzler, Grosse Pointe Park** architects, are preparing plans for new 24-story cooperative apartment building in Detroit for Citizens Redevelopment Corp.

***Frederick E. Wigen & Associates, Saginaw** architects, have been selected to draw plans for a new $200,000 elementary school in Frankenmuth for Frankenmuth Public Schools.

***James K. Haveman, Grand Rapids architect,** is preparing plans for new junior-senior high school in Hamilton, estimated cost $1,000,000, for Hamilton Community Schools.

***Louis C. Kingscott & Associates, Kalamazoo** architects, are preparing plans for new high school in Erie, estimated cost $1,200,000, for Mason Consolidated Schools.

***Herlihy Mid-Construction Co., Comstock,** was low bidder at $370,970 for construction of an administration building in Kalamazoo for Kalamazoo Board of Education.

***Louis C. Kingscott & Associates, Kalamazoo** architects, are preparing preliminary plans for a new $250,000 elementary school in Ionia for Ionia Public Schools.

***Hungerford Construction Co., Jackson,** was low bidder at $192,183 for new terminal and tower buildings at Jackson Municipal Airport for Michigan Department of Aeronautics.

***Herbert D. Ralph Co., Grosse Pointe Farms,** was low bidder at $170,945 for construction of Violet Ave. Elementary School in St. Clair Shores for Lakeshore Public Schools.

***Reb Construction Co., Richmond,** has been awarded contract on bid of $169,500 for new church and rectory in Algonac for St. Catherine's Parish.

***E. J. Kahmann Co., Port Huron,** was low bidder at $183,500 for construction of new elementary school in Marine City for Marine City Community Schools.

***Claude D. Sampson, Jackson architect,** is preparing preliminary plans for a religious education building in Jackson, estimated cost $150,000, for First Congregational Church.

***A. B. Chanel, Battle Creek architect,** is preparing plans for a new $175,000 church in Battle Creek for Central Christian Church.

BOHN EXTRA VOTED

Bohn Aluminum & Brass Corporation, Detroit, has declared its usual quarterly dividend of 25 cents a share, plus an extra of the same amount on its common stock, both payable Dec. 15 to shareholders of record on Dec. 1.

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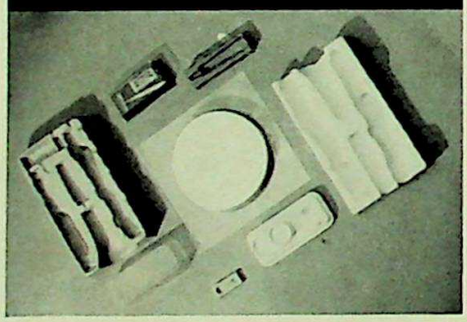

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